

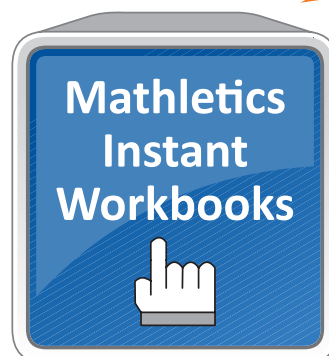
MATHLETICS

Inspiring Better Results

Basic Arithmetic and The Calculator

Student Book - Series H-1

3.4% of 2560 = _____



Basic arithmetic and the calculator

Student Book - Series H

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Author of The Topics and Topic Tests: AS Kalra

Basic arithmetic and the calculator

Topic 1: Addition and subtraction

QUESTION 1 Use a calculator to work out the following.

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| a $28 + 52 + 69 =$ _____ | b $64 + 120 + 43 =$ _____ | c $85 + 36 + 49 =$ _____ |
| d $86 + 34 + 128 =$ _____ | e $192 + 87 + 15 =$ _____ | f $65 + 87 + 235 =$ _____ |
| g $48 + 65 + 579 =$ _____ | h $624 + 8359 =$ _____ | i $6536 + 8538 =$ _____ |
| j $698 + 12653 =$ _____ | k $5834 + 3939 =$ _____ | l $9436 + 3968 =$ _____ |

QUESTION 2 Calculate the following.

- | | | |
|---------------------------------|-----------------------------------|---------------------------------|
| a $9.36 - 4.9 =$ _____ | b $19.79 - 6.3 =$ _____ | c $82.69 - 8.36 =$ _____ |
| d $16.39 - 2.56 =$ _____ | e $56.86 - 12.35 =$ _____ | f $56.83 - 36.5 =$ _____ |
| g $43.68 - 13.5 =$ _____ | h $18.48 - 16.39 =$ _____ | i $93.64 - 86.3 =$ _____ |
| j $92.86 - 53.7 =$ _____ | k $48.43 - 36.382 =$ _____ | l $62.88 - 16.8 =$ _____ |

QUESTION 3 Use your calculator to find the following.

- | | | |
|----------------------------------|-----------------------------------|-----------------------------------|
| a $92.5 + 63.8 =$ _____ | b $96.36 + 8.9 =$ _____ | c $9.3 + 83.5 =$ _____ |
| d $68.6 + 100.65 =$ _____ | e $53.68 + 35.45 =$ _____ | f $63.86 + 30.62 =$ _____ |
| g $68.9 + 93.5 =$ _____ | h $63.56 + 128.86 =$ _____ | i $43.91 + 105.36 =$ _____ |
| j $12.6 + 193.8 =$ _____ | k $13.9 + 123.48 =$ _____ | l $91.8 + 102.76 =$ _____ |

QUESTION 4 Use your calculator to find the following.

- | | | |
|--|--|--|
| a $\frac{4}{9} - \frac{4}{27} =$ _____ | b $\frac{8}{17} - \frac{1}{17} =$ _____ | c $\frac{8}{15} - \frac{3}{15} =$ _____ |
| d $\frac{6}{11} - \frac{2}{11} =$ _____ | e $\frac{8}{9} - \frac{2}{3} =$ _____ | f $\frac{2}{5} - \frac{3}{7} =$ _____ |
| g $2 - \frac{7}{23} =$ _____ | h $\frac{4}{5} - \frac{2}{3} =$ _____ | i $\frac{9}{20} - \frac{3}{20} =$ _____ |

QUESTION 5 Use your calculator to find the following.

- | | | |
|--|---|---|
| a $2\frac{3}{4} - 1\frac{1}{3} =$ _____ | b $20\frac{1}{2} - 5\frac{1}{4} =$ _____ | c $12\frac{1}{4} + 8\frac{1}{4} =$ _____ |
| d $8\frac{1}{2} + 9\frac{3}{4} =$ _____ | e $36\frac{3}{4} - 8\frac{5}{6} =$ _____ | f $7\frac{4}{5} - 3\frac{2}{5} =$ _____ |
| g $15\frac{1}{2} - 8\frac{2}{3} =$ _____ | h $8\frac{1}{4} - 2\frac{2}{3} =$ _____ | i $18\frac{3}{4} - 4\frac{1}{2} =$ _____ |
| j $10\frac{5}{12} - 6\frac{3}{4} =$ _____ | k $8\frac{5}{9} - 4\frac{2}{3} =$ _____ | l $9\frac{5}{6} - 2\frac{3}{4} =$ _____ |

Basic arithmetic and the calculator

Topic 2: Multiplication

QUESTION 1 Use a calculator to work out the following.

- | | | | | | |
|---|-------------------------|---|-------------------------|---|--------------------------|
| a | $64 \times 32 =$ _____ | b | $86 \times 33 =$ _____ | c | $48 \times 92 =$ _____ |
| d | $165 \times 26 =$ _____ | e | $326 \times 54 =$ _____ | f | $436 \times 52 =$ _____ |
| g | $48 \times 120 =$ _____ | h | $432 \times 15 =$ _____ | i | $82 \times 16 =$ _____ |
| j | $64 \times 28 =$ _____ | k | $89 \times 32 =$ _____ | l | $536 \times 109 =$ _____ |

QUESTION 2 Calculate the following.

- | | | | | | |
|---|---------------------------|---|---------------------------|---|----------------------------|
| a | $8.64 \times 5 =$ _____ | b | $6.8 \times 7.9 =$ _____ | c | $5.89 \times 1.2 =$ _____ |
| d | $9.86 \times 12 =$ _____ | e | $53.6 \times 3 =$ _____ | f | $36.85 \times 7.6 =$ _____ |
| g | $9.3 \times 2.1 =$ _____ | h | $86.9 \times 4.1 =$ _____ | i | $2.36 \times 4.5 =$ _____ |
| j | $18.6 \times 6.5 =$ _____ | k | $91.2 \times 4.9 =$ _____ | l | $0.85 \times 8.6 =$ _____ |

QUESTION 3 Use your calculator to find the answer.

- | | | | | | |
|---|--|---|--|---|---|
| a | $\frac{2}{3} \times \frac{5}{7} =$ _____ | b | $\frac{1}{2} \times \frac{1}{3} =$ _____ | c | $\frac{5}{8} \times \frac{2}{3} =$ _____ |
| d | $\frac{1}{4} \times \frac{7}{9} =$ _____ | e | $2\frac{1}{3} \times 1\frac{1}{2} =$ _____ | f | $3\frac{1}{4} \times 2\frac{1}{5} =$ _____ |
| g | $\frac{8}{9} \times 4\frac{1}{4} =$ _____ | h | $4\frac{5}{6} \times 1\frac{3}{4} =$ _____ | i | $\frac{5}{16} \times 3\frac{2}{3} =$ _____ |
| j | $5\frac{5}{6} \times 3\frac{1}{4} =$ _____ | k | $3\frac{1}{2} \times 2\frac{2}{5} =$ _____ | l | $16\frac{1}{2} \times 2\frac{1}{7} =$ _____ |

QUESTION 4 Use your calculator to simplify the following.

- | | | | | | |
|---|--------------------------|---|--------------------------|---|---------------------------|
| a | $35 \times 16 =$ _____ | b | $25 \times 26 =$ _____ | c | $96 \times 54 =$ _____ |
| d | $86 \times 14 =$ _____ | e | $85 \times 31 =$ _____ | f | $32 \times 69 =$ _____ |
| g | $48 \times 2.3 =$ _____ | h | $3.72 \times 8 =$ _____ | i | $9.2 \times 3.7 =$ _____ |
| j | $89 \times 3.54 =$ _____ | k | $5.6 \times 8.9 =$ _____ | l | $15.7 \times 3.9 =$ _____ |

QUESTION 5 Use your calculator to work out the following.

- | | | | | | |
|---|---------------------------|---|---------------------------|---|---------------------------|
| a | $8.6 \times 5.8 =$ _____ | b | $2.86 \times 5.9 =$ _____ | c | $18.6 \times 4.9 =$ _____ |
| d | $93.5 \times 6.6 =$ _____ | e | $6.73 \times 8.5 =$ _____ | f | $5.8 \times 3.4 =$ _____ |
| g | $35.9 \times 2.8 =$ _____ | h | $32.7 \times 8.9 =$ _____ | i | $9.69 \times 3.1 =$ _____ |
| j | $53.8 \times 2.3 =$ _____ | k | $3.8 \times 5.64 =$ _____ | l | $16.8 \times 5.8 =$ _____ |
| m | $9.69 \times 5.4 =$ _____ | n | $9.6 \times 4.2 =$ _____ | o | $9.6 \times 6.9 =$ _____ |

Basic arithmetic and the calculator

Topic 3: Division

QUESTION 1 Use a calculator to work out the following.

- | | | | | | |
|---|-----------------------|---|------------------------|---|-----------------------|
| a | $80 \div 16 =$ _____ | b | $1392 \div 8 =$ _____ | c | $5631 \div 3 =$ _____ |
| d | $72 \div 9 =$ _____ | e | $8100 \div 90 =$ _____ | f | $8995 \div 5 =$ _____ |
| g | $2577 \div 3 =$ _____ | h | $981 \div 9 =$ _____ | i | $940 \div 5 =$ _____ |
| j | $2565 \div 5 =$ _____ | k | $6400 \div 80 =$ _____ | l | $7263 \div 9 =$ _____ |

QUESTION 2 Calculate the following.

- | | | | | | |
|---|------------------------|---|------------------------|---|-------------------------|
| a | $80.4 \div 2 =$ _____ | b | $66.9 \div 3 =$ _____ | c | $63.5 \div 5 =$ _____ |
| d | $90.4 \div 2 =$ _____ | e | $18.27 \div 9 =$ _____ | f | $93.5 \div 0.2 =$ _____ |
| g | $864.5 \div 5 =$ _____ | h | $56.5 \div 5 =$ _____ | i | $86.5 \div 5 =$ _____ |
| j | $96.3 \div 3 =$ _____ | k | $98.6 \div 2 =$ _____ | l | $8500 \div 2.5 =$ _____ |

QUESTION 3 Use your calculator to find the following.

- | | | | | | |
|---|--|---|--|---|---|
| a | $\frac{5}{7} \div \frac{2}{7} =$ _____ | b | $\frac{9}{100} \div \frac{3}{100} =$ _____ | c | $\frac{17}{20} \div \frac{3}{5} =$ _____ |
| d | $2\frac{3}{4} \div 1\frac{1}{2} =$ _____ | e | $6\frac{3}{4} \div 2\frac{1}{4} =$ _____ | f | $18\frac{1}{2} \div 4\frac{1}{2} =$ _____ |
| g | $8\frac{2}{5} \div 3\frac{1}{5} =$ _____ | h | $9\frac{1}{10} \div 1\frac{1}{10} =$ _____ | i | $9\frac{3}{5} \div 1\frac{1}{5} =$ _____ |
| j | $5\frac{1}{4} \div 1\frac{1}{2} =$ _____ | k | $9\frac{7}{10} \div 3\frac{2}{5} =$ _____ | l | $8\frac{3}{4} \div 2\frac{1}{4} =$ _____ |

QUESTION 4 Use your calculator to simplify the following.

- | | | | | | |
|---|-----------------------|---|----------------------------|---|---------------------------|
| a | $112 \div 16 =$ _____ | b | $84.6 \div 3 =$ _____ | c | $642.6 \div 0.02 =$ _____ |
| d | $256 \div 4 =$ _____ | e | $836.22 \div 3 =$ _____ | f | $463.5 \div 0.5 =$ _____ |
| g | $243 \div 3 =$ _____ | h | $512.8 \div 0.4 =$ _____ | i | $128.7 \div 0.03 =$ _____ |
| j | $729 \div 9 =$ _____ | k | $189.36 \div 0.03 =$ _____ | l | $48.9 \div 0.3 =$ _____ |

QUESTION 5 Calculate the following.

- | | | | | | |
|---|--|---|---|---|---|
| a | $9\frac{5}{7} \div \frac{2}{7} =$ _____ | b | $8\frac{5}{6} \div \frac{2}{3} =$ _____ | c | $10\frac{1}{2} \div 2\frac{1}{2} =$ _____ |
| d | $5\frac{3}{8} \div 3\frac{1}{4} =$ _____ | e | $36\frac{1}{4} \div \frac{1}{2} =$ _____ | f | $58\frac{7}{10} \div \frac{2}{5} =$ _____ |
| g | $16\frac{3}{5} \div 1\frac{1}{10} =$ _____ | h | $28\frac{1}{4} \div 1\frac{1}{2} =$ _____ | i | $36\frac{1}{2} \div 2\frac{1}{4} =$ _____ |

Basic arithmetic and the calculator

Topic 4: Approximations and rounding off

QUESTION 1 Round off the following numbers to the nearest unit.

- | | | | | | |
|---|---------------|---|---------------|---|--------------|
| a | 8.2 = _____ | b | 9.13 = _____ | c | 5.46 = _____ |
| d | 31.5 = _____ | e | 81.9 = _____ | f | 3.51 = _____ |
| g | 8.72 = _____ | h | 9.36 = _____ | i | 52.5 = _____ |
| j | 63.18 = _____ | k | 39.09 = _____ | l | 63.7 = _____ |

QUESTION 2 Round off the following numbers to the nearest ten.

- | | | | | | |
|---|--------------|---|----------------|---|--------------|
| a | 56 = _____ | b | 83 = _____ | c | 92 = _____ |
| d | 129 = _____ | e | 365 = _____ | f | 533 = _____ |
| g | 968 = _____ | h | 6359 = _____ | i | 9638 = _____ |
| j | 3541 = _____ | k | 10 356 = _____ | l | 8932 = _____ |

QUESTION 3 Round off the following to the nearest hundred.

- | | | | | | |
|---|--------------|---|--------------|---|--------------|
| a | 867 = _____ | b | 960 = _____ | c | 432 = _____ |
| d | 3256 = _____ | e | 8365 = _____ | f | 9365 = _____ |
| g | 9652 = _____ | h | 9635 = _____ | i | 958 = _____ |
| j | 596 = _____ | k | 3543 = _____ | l | 6831 = _____ |

QUESTION 4 Round off the following numbers to the nearest thousand.

- | | | | | | |
|---|----------------|---|----------------|---|----------------|
| a | 8647 = _____ | b | 6349 = _____ | c | 52 138 = _____ |
| d | 9681 = _____ | e | 5963 = _____ | f | 68 009 = _____ |
| g | 10 543 = _____ | h | 12 684 = _____ | i | 5838 = _____ |
| j | 9325 = _____ | k | 8312 = _____ | l | 15 693 = _____ |

QUESTION 5 Round off the following decimals correct to one decimal place.

- | | | | | | |
|---|---------------|---|---------------|---|---------------|
| a | 8.36 = _____ | b | 0.93 = _____ | c | 12.63 = _____ |
| d | 32.58 = _____ | e | 0.29 = _____ | f | 15.08 = _____ |
| g | 10.48 = _____ | h | 63.38 = _____ | i | 92.75 = _____ |
| j | 49.27 = _____ | k | 86.39 = _____ | l | 66.22 = _____ |

QUESTION 6 Express the following decimals correct to two decimal places.

- | | | | | | |
|---|----------------|---|-----------------|---|-----------------|
| a | 63.831 = _____ | b | 6.531 = _____ | c | 9.631 = _____ |
| d | 8.674 = _____ | e | 83.113 = _____ | f | 60.125 = _____ |
| g | 34.625 = _____ | h | 93.527 = _____ | i | 90.108 = _____ |
| j | 91.218 = _____ | k | 126.361 = _____ | l | 96.136 = _____ |
| m | 39.312 = _____ | n | 19.618 = _____ | o | 343.334 = _____ |

Basic arithmetic and the calculator

Topic 5: Mixed operations

QUESTION 1 Use your calculator to simplify the following.

- | | | | | | |
|---|-------------------------------------|---|-----------------------------------|---|---------------------------------|
| a | $18+9-5=$ _____ | b | $46-18-12=$ _____ | c | $16+21+63-9=$ _____ |
| d | $56-5-3-2=$ _____ | e | $86-(9+2)=$ _____ | f | $(10+5)\times 6=$ _____ |
| g | $18\times 5\times 4\times 3=$ _____ | h | $72\div 3\times 2\times 2=$ _____ | i | $2400\div 5\div 6\div 2=$ _____ |
| j | $8+4\times 5=$ _____ | k | $12+24\div 4=$ _____ | l | $80-7\times 3=$ _____ |

QUESTION 2 Use your calculator to work out the following.

- | | | | | | |
|---|----------------------------------|---|--------------------------------------|---|--------------------------------------|
| a | $365.83+9.3=$ _____ | b | $832.58\div 1.2=$ _____ | c | $36.8+83.5-8.7=$ _____ |
| d | $4\times 5.6+3\times 1.2=$ _____ | e | $8.6\times 5.8\times 1.3=$ _____ | f | $83.9+56.5\times 2=$ _____ |
| g | $6.9\times 8.3-15.4=$ _____ | h | $8.9\times 2.5+3.6\times 1.5=$ _____ | i | $0.3\times 1.5+8.3\times 1.2=$ _____ |
| j | $83.6-2.4\times 1.2=$ _____ | k | $6.8\times 2.3\times 1.5=$ _____ | l | $96.8+5.7\times 2.1=$ _____ |

QUESTION 3 Calculate the following.

- | | | | | | |
|---|---|---|---|---|--|
| a | $9\frac{1}{2}+\frac{3}{4}+\frac{2}{3}=$ _____ | b | $4\frac{2}{5}+3\frac{2}{3}-2\frac{4}{5}=$ _____ | c | $9\frac{1}{3}+\frac{2}{9}-\frac{1}{3}=$ _____ |
| d | $6\frac{3}{4}-2\frac{1}{2}+1\frac{1}{8}=$ _____ | e | $9\frac{3}{5}-2\frac{2}{5}+5\frac{1}{3}=$ _____ | f | $9\frac{2}{7}\div 2\frac{1}{12}\times \frac{1}{4}=$ _____ |
| g | $9\frac{2}{3}-3\frac{5}{6}+1\frac{1}{3}=$ _____ | h | $3\frac{1}{2}\times \frac{4}{15}\div 2\frac{1}{4}=$ _____ | i | $\frac{3}{5}\times \frac{10}{21}\times \frac{11}{15}=$ _____ |

QUESTION 4 Use your calculator to answer the following.

- | | | | | | |
|---|--------------------------------|---|----------------------------------|---|---------------------------------|
| a | $36.7-9.3+15.25=$ _____ | b | $9.8+(5.6\times 1.3)=$ _____ | c | $900\div 10\times 9=$ _____ |
| d | $6783\div (8.3-5.3)=$ _____ | e | $8.25\times 1.4-2.78=$ _____ | f | $63.8+8.7=$ _____ |
| g | $825.6\times 9.2-215.7=$ _____ | h | $8.6\times 5.2\times 2.3=$ _____ | i | $96+124-63=$ _____ |
| j | $53.7+8.3\times 1.2=$ _____ | k | $9.6\div 1.2+8.9=$ _____ | l | $12.8\times 8.3\div 1.2=$ _____ |

QUESTION 5 Use the fraction key to calculate the following.

- | | | | | | |
|---|---|---|---|---|---|
| a | $\frac{2}{3}+\frac{1}{6}-\frac{1}{9}=$ _____ | b | $2\frac{1}{3}+5\frac{1}{4}-3=$ _____ | c | $\frac{1}{8}\times \frac{4}{7}\div \frac{1}{2}=$ _____ |
| d | $4\frac{1}{2}\times 5\frac{2}{3}\div 1\frac{1}{2}=$ _____ | e | $\frac{2}{5}\times \frac{4}{7}\div \frac{1}{2}=$ _____ | f | $2\frac{3}{4}-1\frac{1}{8}+3\frac{1}{4}=$ _____ |
| g | $3\frac{1}{2}\times 2\frac{1}{2}\times 1\frac{1}{2}=$ _____ | h | $2\frac{1}{4}\div \frac{2}{5}\times \frac{7}{9}=$ _____ | i | $5\frac{3}{5}\times \frac{4}{7}\div 2\frac{1}{5}=$ _____ |
| j | $\frac{5}{14}\times \frac{7}{10}\times 1\frac{2}{3}=$ _____ | k | $\frac{5}{9}+\frac{11}{12}-\frac{5}{6}=$ _____ | l | $9\frac{3}{7}\div 1\frac{1}{4}\times 2\frac{1}{2}=$ _____ |

Basic arithmetic and the calculator

Topic 6: Squares, cubes and powers

QUESTION 1 Use the x^2 key to evaluate the following.

- | | | |
|------------------------------|-----------------------------|-----------------------------|
| a $(6)^2 =$ _____ | b $(8)^2 =$ _____ | c $(11)^2 =$ _____ |
| d $(56)^2 =$ _____ | e $(35)^2 =$ _____ | f $(69)^2 =$ _____ |
| g $(8.5)^2 =$ _____ | h $(3.4)^2 =$ _____ | i $(7.9)^2 =$ _____ |
| j $(13.65)^2 =$ _____ | k $(15.3)^2 =$ _____ | l $(18.1)^2 =$ _____ |

QUESTION 2 Use the y^2 key to find the answer.

- | | | |
|--------------------------|--------------------------|----------------------------|
| a $(3)^3 =$ _____ | b $(5)^3 =$ _____ | c $(7)^3 =$ _____ |
| d $(9)^3 =$ _____ | e $(4)^3 =$ _____ | f $(5)^4 =$ _____ |
| g $(6)^4 =$ _____ | h $(3)^5 =$ _____ | i $(4)^5 =$ _____ |
| j $(2)^8 =$ _____ | k $(3)^7 =$ _____ | l $(2.4)^3 =$ _____ |

QUESTION 3 Calculate the following correct to 2 decimal places.

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| a $(4.1)^3 =$ _____ | b $(2.7)^3 =$ _____ | c $(9.4)^3 =$ _____ |
| d $(8.3)^4 =$ _____ | e $(5.3)^4 =$ _____ | f $(16.3)^4 =$ _____ |
| g $(12.5)^2 =$ _____ | h $(6.7)^5 =$ _____ | i $(8.1)^5 =$ _____ |
| j $(91.7)^2 =$ _____ | k $(31.8)^2 =$ _____ | l $(43.6)^2 =$ _____ |

QUESTION 4 Evaluate the following. Leave your answers in fraction form.

- | | | |
|--|--|--|
| a $\left(1\frac{1}{4}\right)^2 =$ _____ | b $\left(\frac{2}{5}\right)^3 =$ _____ | c $\left(2\frac{1}{4}\right)^2 =$ _____ |
| d $\left(2\frac{1}{2}\right)^2 =$ _____ | e $\left(6\frac{1}{5}\right)^2 =$ _____ | f $\left(9\frac{1}{2}\right)^2 =$ _____ |
| g $\left(3\frac{3}{5}\right)^2 =$ _____ | h $\left(2\frac{1}{2}\right)^4 =$ _____ | i $\left(5\frac{1}{2}\right)^4 =$ _____ |
| j $\left(1\frac{1}{2}\right)^3 =$ _____ | k $\left(1\frac{1}{3}\right)^3 =$ _____ | l $\left(3\frac{1}{5}\right)^2 =$ _____ |

QUESTION 5 Use your calculator to evaluate the following correct to 2 decimal places.

- | | | |
|-----------------------------|------------------------------|-----------------------------|
| a $(6.9)^2 =$ _____ | b $(8.12)^2 =$ _____ | c $(9.23)^2 =$ _____ |
| d $(5.4)^3 =$ _____ | e $(6.8)^3 =$ _____ | f $(9.3)^3 =$ _____ |
| g $(1.2)^4 =$ _____ | h $(8.93)^2 =$ _____ | i $(9.1)^3 =$ _____ |
| j $(18.4)^2 =$ _____ | k $(19.34)^2 =$ _____ | l $(6.5)^3 =$ _____ |
| m $(4.6)^4 =$ _____ | n $(1.2)^5 =$ _____ | o $(8.1)^3 =$ _____ |

Basic arithmetic and the calculator

Topic 7: Square roots and cube roots

QUESTION 1 Use the square root key to simplify the following.

| | | | | | |
|---|--------------------------------|---|---------------------------------|---|-----------------------------------|
| a | $\sqrt{4} =$ _____ | b | $\sqrt{36} =$ _____ | c | $\sqrt{49} =$ _____ |
| d | $\sqrt{64} =$ _____ | e | $\sqrt{121} =$ _____ | f | $\sqrt{144} =$ _____ |
| g | $\sqrt{169} =$ _____ | h | $\sqrt{64} + \sqrt{25} =$ _____ | i | $\sqrt{9} \sqrt{64} =$ _____ |
| j | $\sqrt{625} \sqrt{25} =$ _____ | k | $\sqrt{225} \sqrt{64} =$ _____ | l | $\sqrt{676} + \sqrt{576} =$ _____ |

QUESTION 2 Use the cube root key to evaluate the following.

| | | | | | |
|---|---------------------------------------|---|---------------------------|---|------------------------------------|
| a | $\sqrt[3]{27} =$ _____ | b | $\sqrt[3]{64} =$ _____ | c | $\sqrt[3]{216} =$ _____ |
| d | $\sqrt[3]{343} =$ _____ | e | $\sqrt[3]{729} =$ _____ | f | $\sqrt[3]{2197} =$ _____ |
| g | $\sqrt[3]{512} =$ _____ | h | $\sqrt[3]{125} =$ _____ | i | $\sqrt[3]{8} \sqrt[3]{27} =$ _____ |
| j | $\sqrt[3]{64} \sqrt[3]{1000} =$ _____ | k | $\sqrt[3]{1.728} =$ _____ | l | $9 \sqrt[3]{125} =$ _____ |

QUESTION 3 Use your calculator to simplify the following correct to one decimal place.

| | | | | | |
|---|---------------------------------------|---|---|---|--|
| a | $\sqrt{49} \ 1.5 =$ _____ | b | $\sqrt[3]{1.728} \ \sqrt[3]{8} =$ _____ | c | $\sqrt{1.21} \ \sqrt{9} =$ _____ |
| d | $\sqrt{10.24} \ \sqrt[3]{8} =$ _____ | e | $\sqrt{0.04} \ \sqrt{0.64} =$ _____ | f | $\sqrt{64} \ \sqrt{2.56} =$ _____ |
| g | $\sqrt[3]{125} \ \sqrt{5.76} =$ _____ | h | $\sqrt[3]{0.343} =$ _____ | i | $\sqrt[3]{2.197} =$ _____ |
| j | $\sqrt[3]{729} \ \sqrt{4} =$ _____ | k | $\sqrt[3]{512} \ \sqrt{9} =$ _____ | l | $\sqrt[3]{1331} \ \sqrt[3]{8} =$ _____ |

QUESTION 4 Use your calculator to simplify the following correct to two decimal places.

| | | | | | |
|---|--|---|---|---|---|
| a | $\sqrt{8\frac{1}{4}} =$ _____ | b | $\sqrt{\frac{5}{7}} =$ _____ | c | $\sqrt{6\frac{1}{3}} =$ _____ |
| d | $\sqrt[3]{16\frac{2}{5}} =$ _____ | e | $\sqrt[3]{9\frac{3}{4}} =$ _____ | f | $\sqrt{6\frac{1}{4}} =$ _____ |
| g | $\sqrt{1\frac{1}{2}} \ \sqrt[3]{5\frac{1}{4}} =$ _____ | h | $\sqrt{49} \ \sqrt[3]{3\frac{1}{4}} =$ _____ | i | $\sqrt[3]{30\frac{2}{5}} =$ _____ |
| j | $\sqrt{\frac{6}{7}} + \sqrt{2\frac{5}{8}} =$ _____ | k | $\sqrt[3]{8} \ \sqrt[3]{\frac{7}{8}} =$ _____ | l | $\sqrt{7\frac{3}{4}} + \sqrt{\frac{81}{4}} =$ _____ |

QUESTION 5 Use your calculator to evaluate the following correct to one decimal place.

| | | | | | |
|---|---------------------------|---|---|---|----------------------------|
| a | $\sqrt{5.87} =$ _____ | b | $\sqrt[3]{343} =$ _____ | c | $\sqrt{72.25} =$ _____ |
| d | $\sqrt[3]{3.68} =$ _____ | e | $\sqrt[3]{1.728} + \sqrt{1.21} =$ _____ | f | $\sqrt{9.61} =$ _____ |
| g | $\sqrt[3]{19.64} =$ _____ | h | $\sqrt[3]{0.125} =$ _____ | i | $\sqrt[3]{12.167} =$ _____ |
| j | $\sqrt{16.4} =$ _____ | k | $\sqrt{5.76} =$ _____ | l | $\sqrt[3]{0.512} =$ _____ |

Basic arithmetic and the calculator

Topic 8: Money and the calculator

QUESTION 1 Use your calculator to work out the following questions. Give your answer in dollars and cents.

- a $\$20.65 + \$3.85 =$ _____ b $8 \times \$4.45 =$ _____ c $\$56.70 + \$83.20 =$ _____
d $\$18.40 + \$23.65 =$ _____ e $\$58.60 + \$43.35 =$ _____ f $\$14.50 \times 9 =$ _____
g $\$609 - \$68.70 =$ _____ h $\$82.60 - \$39.25 =$ _____ i $\$25.80 \times 4 =$ _____
j $\$272 \div 5 =$ _____ k $5 \times \$23.80 =$ _____ l $\$95.35 + \$36.40 =$ _____

QUESTION 2 Use your calculator to work out the following questions. Give your answer in dollars and cents.

- a $\$68 + 65\text{¢} =$ _____ b $\$83.30 + 65\text{¢} =$ _____ c $\$168.75 + \$35 =$ _____
d $85\text{¢} + \$25.30 =$ _____ e $\$293.50 - \$70 =$ _____ f $\$95.65 - \$35.80 =$ _____
g $65\text{¢} \times 23 =$ _____ h $\$0.72 \div 72 =$ _____ i $\$609 - \$5.88 =$ _____
j $12\text{¢} \times 600 =$ _____ k $\$283 - 89\text{¢} =$ _____ l $\$125.68 - \$30.65 =$ _____

QUESTION 3 Work out the following questions.

- a $\$8.95 \div 5 =$ _____ b $\$86.30 - \$39.53 =$ _____ c $\$19.60 - \$6.30 =$ _____
d $\$6.30 \times 9 =$ _____ e $\$48.69 - \$32.64 =$ _____ f $\$151.60 + \$82.30 =$ _____
g $\$15.65 + \$10.63 =$ _____ h $\$213.60 - \$85.30 =$ _____ i $\$92.85 - \$36.30 =$ _____
j $\$8.64 + \$9.32 =$ _____ k $\$9.64 - \$8.33 =$ _____ l $\$121.65 - \$120.30 =$ _____

QUESTION 4 Round off to the nearest 5 cents.

- a $\$2.36 =$ _____ b $\$4.76 =$ _____ c $\$29.87 =$ _____
d $\$25.83 =$ _____ e $\$18.93 =$ _____ f $\$64.33 =$ _____
g $\$15.68 =$ _____ h $\$10.64 =$ _____ i $\$212.83 =$ _____
j $\$19.69 =$ _____ k $\$25.63 =$ _____ l $\$34.48 =$ _____

QUESTION 5 Answer the following questions

- a Find the cost of 34 pens at \$5.65 each. _____
b Divide \$4626 equally among three people. _____
c If 4 dozen cans cost \$24, find the cost of 1 can. _____
d Find the cost of 130 rulers at \$1.05 each. _____
e Find the cost of 3.5 kg of oranges at \$2.60/kg. _____
f Find the cost of 12 work books at \$6.30 each. _____
g Find the cost (to the nearest 5 cents) of 3.5 kg of chicken at \$7.85/kg. _____
h One dozen eggs cost \$4.80. Find the cost of 1 egg. _____
i Find the cost of 10 calculators at \$23.50 each. _____

Basic arithmetic and the calculator

Unit Test

PART A

- Instructions** This part consists of 12 multiple-choice questions
Each question is worth 1 mark
Fill in only ONE CIRCLE for each question
Calculators are NOT allowed

Time allowed: 15 minutes

Total marks = 12

Marks

- | | | | | | | |
|-----------|---|---------------------|---------------------|---------------------|--------------------|---|
| 1 | $16 \times 4 + 5 \times 8$ equals | (A) 112 | (B) 108 | (C) 104 | (D) 102 | 1 |
| 2 | The value of $\frac{1}{2} + \frac{1}{3} + \frac{1}{4}$ is | (A) $2\frac{1}{12}$ | (B) $1\frac{1}{12}$ | (C) $3\frac{1}{12}$ | (D) $\frac{1}{12}$ | 1 |
| 3 | $5.24 + 6.1 \times 1.2$ equals | (A) 12.56 | (B) 13.608 | (C) 12.61 | (D) 13.618 | 1 |
| 4 | $9 \times 5 \times 2 \times 10$ equals | (A) 500 | (B) 900 | (C) 1000 | (D) 2000 | 1 |
| 5 | 36×10^4 equals | (A) 360 000 | (B) 180 000 | (C) 480 000 | (D) 720 000 | 1 |
| 6 | $(0.5)^2 - (0.2)^2$ equals | (A) 0.25 | (B) 0.24 | (C) 0.21 | (D) 0.215 | 1 |
| 7 | $\sqrt{10^2 - 8^2}$ equals | (A) 4 | (B) 5 | (C) 6 | (D) 7 | 1 |
| 8 | $\frac{1}{3} \times \frac{1}{3}$ equals | (A) $\frac{1}{9}$ | (B) $\frac{1}{3}$ | (C) $\frac{2}{3}$ | (D) none of these | 1 |
| 9 | $9.9 - 0.09$ equals | (A) 9.81 | (B) 9.19 | (C) 9.081 | (D) 9.009 | 1 |
| 10 | What is the number 8547 rounded to the nearest hundred? | (A) 9000 | (B) 8600 | (C) 8550 | (D) 8500 | 1 |
| 11 | Paper clips cost 60 cents per 100. How many paper clips would \$30 buy? | (A) 50 | (B) 500 | (C) 5000 | (D) 50 000 | 1 |
| 12 | $(0.2)^2 =$ | (A) 0.04 | (B) 0.4 | (C) 4.0 | (D) 0.02 | 1 |

Total marks achieved for PART A

12

Basic arithmetic and the calculator

Unit Test

PART B

Instructions This part consists of 15 questions
 Each question is worth 1 mark
 Write answers in the answers-only column

Time allowed: 20 minutes

Total marks = 15

| Questions | Answers only | Marks |
|--|--------------|-------|
| Simplify the following correct to two decimal places where applicable. | | |
| 1 $583.6 + 8.365 + 19$ | _____ | 1 |
| 2 $93.6 \div 0.012$ | _____ | 1 |
| 3 $2\frac{3}{5} \div 1\frac{2}{5} \times \frac{2}{3}$ | _____ | 1 |
| 4 $8\frac{1}{2} + 2\frac{1}{3} - 1\frac{3}{4}$ | _____ | 1 |
| 5 $\frac{4}{5} \times 2.13 \times 5^3$ | _____ | 1 |
| 6 $(2.9)^3$ | _____ | 1 |
| 7 $\frac{17}{30} + \frac{2}{5}$ | _____ | 1 |
| Simplify the following correct to one decimal place. | | |
| 8 $28.36 + (18.23 \div 5.3)$ | _____ | 1 |
| 9 $\sqrt{36} + \sqrt{39}$ | _____ | 1 |
| 10 $\sqrt[3]{81} - \sqrt[3]{64}$ | _____ | 1 |
| 11 $85.95 - 36.15 \times 0.03$ | _____ | 1 |
| 12 $\frac{1}{\sqrt{16.8 + (2.3)^2}}$ | _____ | 1 |
| 13 $\frac{9620}{38.56 + 43.84}$ | _____ | 1 |
| 14 $\sqrt{1960} + 2^3 \times \frac{1}{2}$ | _____ | 1 |
| 15 $\frac{(3.15)^2}{8.4} + 6.38$ | _____ | 1 |

Total marks achieved for PART B

| |
|----|
| 15 |
|----|