

Year 9 Procedural Revision.

1. Write the following numbers in words

- a) 264 b) 13804 c) 4538080

2. Write the following words in numbers

- a) One thousand, six hundred and four
 b) Two thousand, one hundred and five
 c) Six hundred thousand, four hundred and thirty five.

3. Fill in the missing number

- a) $3543 + 182 = \underline{\hspace{2cm}}$ b) $4836 - 1098 = \underline{\hspace{2cm}}$ c) $3862 - \underline{\hspace{2cm}} = 2709$
 d) $1568 + \underline{\hspace{2cm}} = 2879$ e) $9 \times \underline{\hspace{2cm}} = 27$ f) $72 \div \underline{\hspace{2cm}} = 9$
 g) $\underline{\hspace{2cm}} \times 6 = 30$ h) $\underline{\hspace{2cm}} \div 7 = 4$

4. Find the value of

- a) 5^2 b) 8^2 c) 12^2 d) $\sqrt{36}$ e) $\sqrt{81}$ f) $\sqrt{49}$ g) 4^3 h) 2^3 g) 10^3 i) $\sqrt[3]{27}$ j) $\sqrt[3]{64}$
 k) the reciprocal of 2 l) the reciprocal of 10 m) the reciprocal of $\frac{1}{2}$ n) the reciprocal of $\frac{2}{5}$

5. Write the following numbers in standard form

- a) 2390000 b) 39400 c) 3000000000 d) 0.0087 e) 0.000145

6. Write the following as ordinary numbers

- a) 1.4×10^3 b) 3.56×10^6 c) 4.9×10^{-3} d) 5.96×10^{-7}

7. Write the following improper fractions as mixed number fractions

- a) $\frac{5}{4}$ b) $\frac{8}{3}$ c) $\frac{26}{5}$ d) $\frac{45}{7}$

8. Write the following mixed number fractions as improper fractions

- a) $3\frac{1}{4}$ b) $5\frac{2}{5}$ c) $2\frac{2}{7}$ d) $7\frac{7}{9}$

9. Fill in the table below

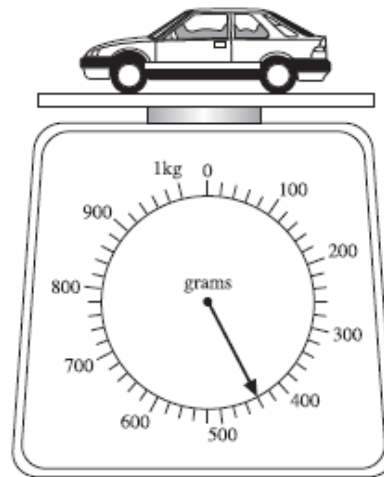
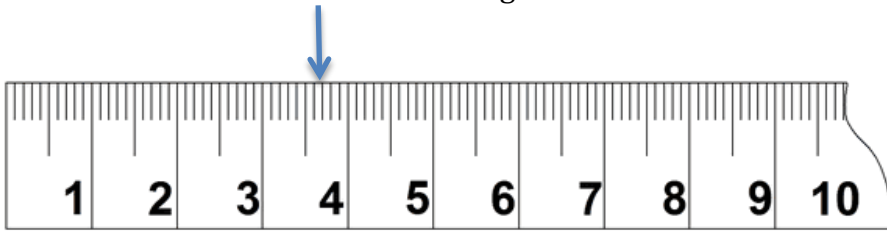
Fraction	Percentage	Decimal
$\frac{1}{2}$		
	25%	
		0.1
$\frac{1}{5}$		
	40%	
		0.3
	75%	

10. Place the following fractions in order of size, smallest first

- $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{10}$ $\frac{1}{5}$ $\frac{3}{10}$

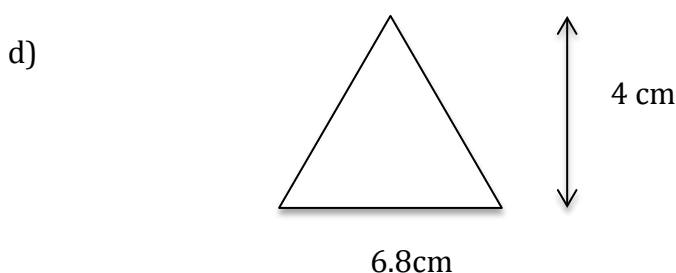
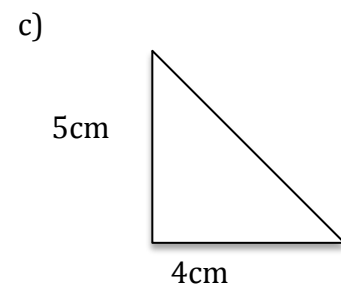
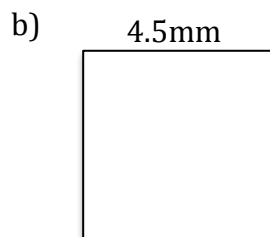
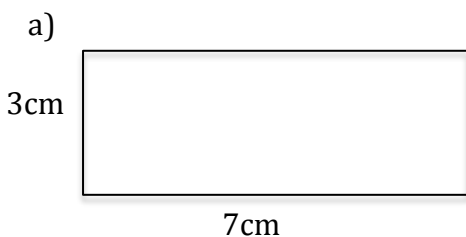
11. Find
- a) 10% of 320 b) 20% of 320 c) ____% of 320 = 96
d) 1% of 560kg e) 6% of 560kg
12. Find the value of
- a) $\frac{3}{5}$ of 20kg b) $\frac{2}{7}$ of 35g c) $\frac{7}{10}$ of £2 d) $\frac{3}{4}$ of 124m
13. (a) Write 3 as a percentage of 10 (b) Write 12 as a percentage of 25
14. a) Share 160 sweets in the ratio of 1 : 9 b) Share £150 in the ratio of 2 : 3 : 5
c) Tim shared 50 pens between himself and his friend Tom in the ratio of 4: 1. How many pens will each boy receive?
d) If 6 apples cost £1.80, how much would 15 apples cost?
- 15.
- a) $0 \cdot 33 + 8 \cdot 2 = \underline{\hspace{2cm}}$ b) $78 \cdot 335 - 38 \cdot 2 = \underline{\hspace{2cm}}$ c) $35.938 + 7.82 + 9 = \underline{\hspace{2cm}}$
c) $0 \cdot 3 \times 2 = \underline{\hspace{2cm}}$ d) $8 \times 0 \cdot 02 = \underline{\hspace{2cm}}$ e) $64 \div 0 \cdot 8 = \underline{\hspace{2cm}}$
f) $39 \div 0 \cdot 3 = \underline{\hspace{2cm}}$ g) $24 \div 0.03 = \underline{\hspace{2cm}}$ h) $35 \times 18 = \underline{\hspace{2cm}}$
i) $374 \times 82 = \underline{\hspace{2cm}}$ j) $1250 \div 25 = \underline{\hspace{2cm}}$
16. Estimate the total of the following lengths
1.95m, 3.75m, 1.2m, 7.05m.
17. Tom bought 9 packets of sweets for his friends. Each packet of sweets cost £1.95. **Estimate** how much Tom spent on the sweets.
18. Round the following values correct to 1 decimal place.
a) 83.23 b) 3.78 c) 0.372 d) 0.999
Round the following values correct to 2 decimal places.
e) 12.736 f) 43.781 g) 80.372 h) 0.999
Round the following values correct to 3 decimal places.
i) 12.4764 j) 83.7850 k) 290.3728 l) 0.9999
Round the following values correct to 1 significant figure.
m) 465 n) 5368 o) 8.87 p) 0.99
Round the following values correct to 2 significant figures.
q) 2871 r) 8310 s) 90.3728 t) 0.9999
19. Round the following to the nearest *penny*
a) £38.876 b) £198.820 c) £99.999
20. Round the following to the nearest *tenth* of a second
a) 3.928 seconds b) 7.952 seconds c) 87.975 seconds
21. Round the following to the nearest *hundredth* of a second
a) 3.928 seconds b) 7.952 seconds c) 87.975 seconds
22. a) Write down all of the multiples of 4 between 20 and 40
b) Write down all of the multiples of 9 between 60 and 120
c) Write down all of the multiples of 12 between 50 and 150
23. a) Write down all of the factors of 20
b) Write down all of the factors of 36
c) Write down all of the factors of 56

24. a) Find the value of $(3 + 3)^2 \times 5$
 b) Find the value of $5 - 4 + (6 \times 5)$
 c) Find the value of $(3 \times 6^2) + 7 \times 4$
25. Susan changed £400 into Euros when the exchange rate was £1 = 1.15€. How many euros did Susan receive?
26. Read the value on each of the following scales.

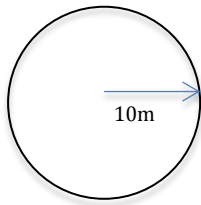


The toy car weighs g.

27. Convert the following measurements into the units in brackets.
- a) 37cm (mm) b) 4976m (km) c) 398g (mg) d) 29mm (cm)
 e) 4.5L (ml) f) 8kg (g) g) 1872m (km) h) 7.9m (cm)
28. Find the perimeter and area of each of the following shapes clearly stating the units of your answer.

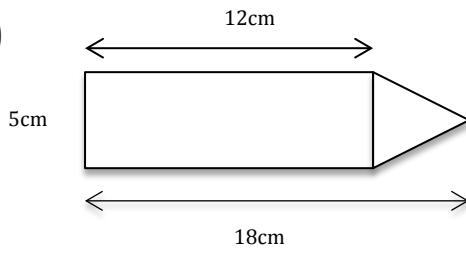


e)



Find the circumference and area of the circle using $\pi = 3.14$.

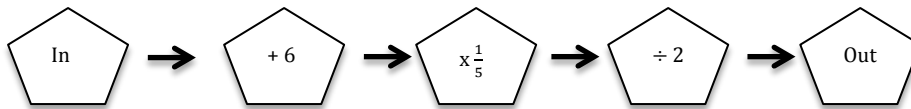
f)



29. Eric travelled 90 miles in 2 hours. Calculate the average speed that Eric travelled at.

30. Find the mean, median, mode and range of
12, 15, 17, 15, 16, 15, 15.

31.



Find the output when the input is 14.