



S2 November Assessment Revision

Previous Revision

1. Find the following:

a. 5.27×500

b. $81 \div 9000$

c. 3000×1.74

d. 0.0026×300

2. Write the following numbers as product of prime factors:

a. 24

b. 81

c. 100

3. Simplify the following expressions:

a. $6e - 5r + 3 - 2r + 9e - 5$

b. $10 - 7y + 4p - 3y - 9p + 1$

c. $3r^2 - 5r + 7 - 2r^2 - 7r + 1$

d. $19w^3 - 3w^2 + w - 17w^2 + 4w^3 - 5w$

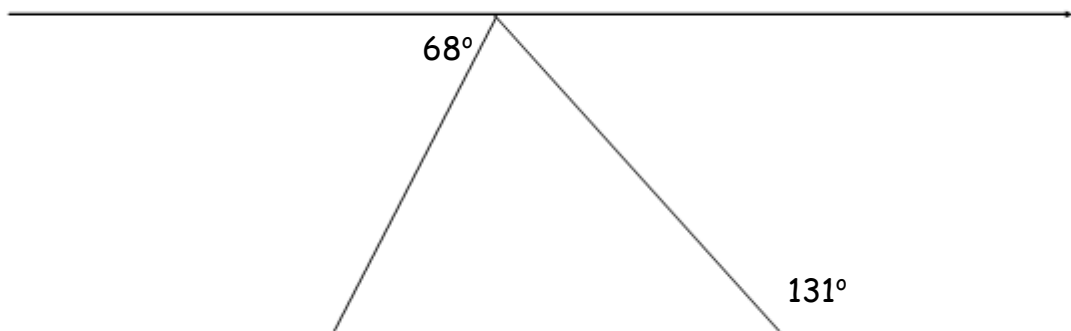
4. Lottery winnings of £169 000 are shared in the ratio of 7 : 4 : 2 between a group of people. Calculate how much each person would receive.

5. Factorise the following:

a. $6e - 8e^3$

b. $12rs - 20s^3$

6. Complete all angles in the diagram below:



7. Evaluate the following expressions where $g = -4$, $h = 5$ and $i = 7$:

a. gh

b. $hi^2 - g$

c. $hi - g^2$

d. $(h - g)^2 + hi$



8. Factorise the following expressions:

a. $4b - 12$

b. $5g + 35$

c. $8u - 64$

d. $6j - 42$

9. Calculate the following:

a. 30% of £590

b. 15% of £440

c. 35% of £600

d. 85% of £820

10. Convert the following measurements into centimetres (cm):

a. 12m

b. 8.13m

c. 3km

11. Share out the following amounts:

a. £43,495 in the ratio of 3 : 2

b. £80,289 in the ratio of 2 : 7

12. Multiply out the following and simplify:

a. $5(7y - 5) + 2y$

b. $8(3w + 5) - 4(8w - 3)$

c. $e(e - 2) + 7e$

d. $6j(2j - 5) - 3j(4j - 9)$

13. If $e = -2$, $f = 4$ and $g = -5$, evaluate the following:

a. $f - 2e + 5g$

b. $(ef)^2 - 4g$

c. $(g - e)^2 - 2f$

d. $eg^2 - efg$

Fractions

1. Find the following:

a. $\frac{3}{4} + \frac{2}{5}$

b. $\frac{1^2}{3} \times \frac{7}{10}$

c. $\frac{2^2}{3} - \frac{4}{9}$

2. Find the following:

a. $\frac{3}{7} + \frac{1}{3}$

b. $\frac{1^2}{5} - \frac{4}{9}$

c. $\frac{4}{5} \times \frac{6}{7}$

3. Find the perimeter and area of the following:



$$3\frac{1}{2}$$

$$\frac{6}{7}$$



4. Find the following:

a. $\frac{3}{5} + \frac{1}{4}$

b. $2\frac{4}{5} - 1\frac{1}{3}$

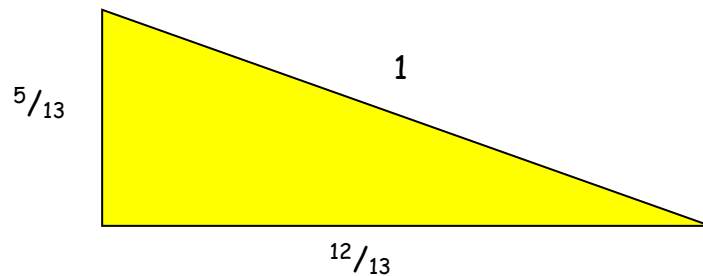
c. $3 \times \frac{4}{9}$

d. $\frac{5}{6} \div \frac{1}{3}$

e. $1\frac{2}{7} \times 2\frac{1}{4}$

f. $2\frac{3}{4} \div 1\frac{1}{3}$

6. A right-angled triangle can be seen below.



Find: a. Area

b. Perimeter

7. A piece of rope is $4\frac{2}{7}$ metres long. It has to be cut into pieces of length $\frac{2}{3}$ metres long. How many FULL pieces can be cut?

Equations

1. Solve the following equations:

a. $4e - 3 = 13$

b. $8r - 5 = 2r + 20$

c. $5(h - 3) = 2(h - 1)$

d. $7 - 3(k - 2) = 5(k + 2) + 6k$

2. Solve the following equations:

a. $9i - 3 = 8i + 12$

b. $6p - 2 = 3p + 10$

c. $12 + 3p = 5p - 2$

d. $8 - 4u = 7 - 3u$

3. Solve the following equations:

a. $7(h - 2) = 3(h + 5)$

b. $4 - 2(j - 3) = 6(j + 1) - 2$

c. $9(e - 4) - 3(e - 2) = 15$

d. $7 - 4(f - 3) + 6f = 9(f - 5)$



4. Solve the following equations:

a. $5r - 6 = 20$

b. $3(g - 3) = 6(g + 5)$

c. $5(h + 2) - h = 3(h + 4)$

d. $6 - 3(j - 1) + 5(j + 3) = 10$

5. Solve the following equations:

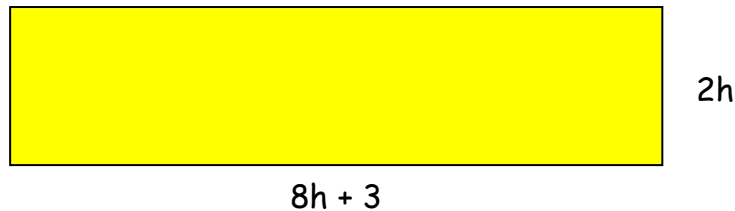
a. $7(h - 2) = 3(h + 5)$

b. $4 - 2(j - 3) = 6(j + 1) - 2$

c. $9(e - 4) - 3(e - 2) = 15$

d. $7 - 4(f - 3) + 6f = 9(f - 5)$

6. A rectangle can be seen below:



a. Find a simplified expression for the area of the rectangle.

b. Find a simplified expression for the perimeter of the rectangle.

The perimeter of the shape is 100m.

c. Hence, find the value of h .

7. Paul is double the age of Calum. When their ages are combined, the value is 51 years.

By creating an equation, solve to gain Paul's age.

8. A family has 5 members in total with a combined age of 96 years.

The family are going on holiday; however the travel agent cannot read the age of the youngest child to complete the booking form.

The agent knows that one of the siblings is 4 years older than the youngest sibling and the other sibling is 7 years older than the youngest sibling. Both parents are 30 years older than their youngest child.

By creating an equation, find the age of the youngest child.



Statistics

1. The following information represents the weight of people, in kg, at a training camp:

71, 69, 60, 56, 72, 66, 64, 64, 68, 74, 68, 85, 68, 77,
59, 64, 68, 79, 75, 78, 70, 68, 68, 66, 69, 68

- Display the information in an ordered stem and leaf diagram.
- Find the median.

2. The following information below represents the ages of people on a bus:

29, 15, 8, 12, 8, 21, 34, 20, 11, 16, 28, 8, 5, 14

- Display the information in an ordered stem and leaf diagram.
- Find
 - Range
 - Mode
 - Median

3. The results of a sports survey are shown in the table below.

Sport	Number
Swimming	12
Football	5
Athletics	20
Tennis	3
Track Cycling	15
Hockey	5

Calculate the size of angle each section would represent in a pie chart.