Year 6 Maths Activity Mat

Section 1

A bag of balls contains 3 red and 5 blue balls. A school buys some bags of balls. There are 9 red balls. How many blue balls are there?

Section 2

$y = x + 2$

If x = 6, what is y?

If y = 5, what is x?

Section 3

Calculate:

25% of £24 =

10% of £32 =

Section 4

Calculate:

$\frac{1}{2} + \frac{1}{4} =$

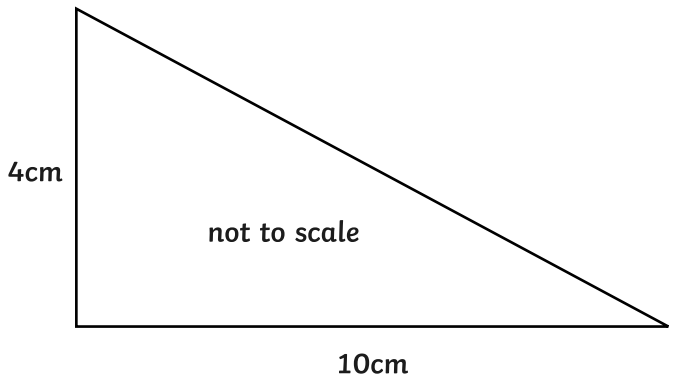
$\frac{2}{3} - \frac{1}{6} =$

Section 5

There are 20 people in a cinema. Adults pay £10 and children £6. The takings are £164. How many children are in the cinema?

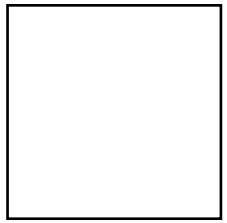
Section 6

Calculate the area of this right angled triangle:



Section 7

Calculate the angles in this square:



Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts being washed:

Alison has 12 t-shirts. 7 are in her drawer. The rest are being washed. How many t-shirts are being washed?

Year 6 Maths Activity Mat: 6

Answers

Section 1

A bag of balls contains 3 red and 5 blue balls. A school buys some bags of balls. There are 9 red balls. How many blue balls are there?

15 blue balls

Section 2

$y = x + 2$

If x = 6, what is y? **8**

If y = 5, what is x? **3**

Section 3

Calculate:

25% of £24 = **£6**

10% of £32 = **£3.20**

Section 4

Calculate:

$\frac{1}{2} + \frac{1}{4} =$ $\frac{3}{4}$

$\frac{2}{3} - \frac{1}{6} =$ $\frac{3}{6}$ or $\frac{1}{2}$

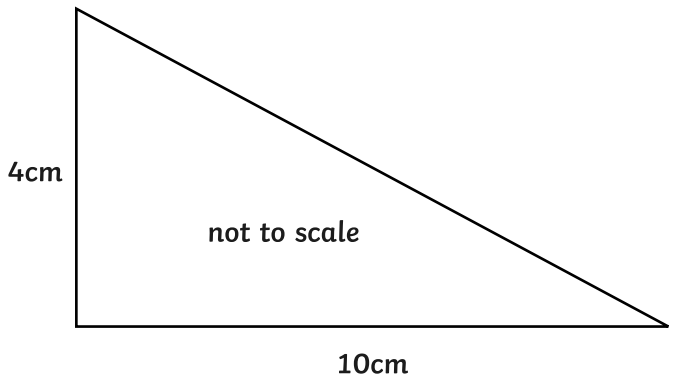
Section 5

There are 20 people in a cinema. Adults pay £10 and children £6. The takings are £164. How many children are in the cinema?

9 children

Section 6

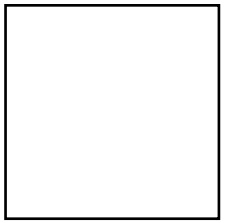
Calculate the area of this right angled triangle:



20cm²

Section 7

Calculate the angles in this square:



90°

Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts being washed:

Alison has 12 t-shirts. 7 are in her drawer. The rest are being washed. How many t-shirts are being washed?

t = 12 – 7 or 12 = t + 7

Year 6 Maths Activity Mat

Section 1

A bag of balls contains 2 red, 1 green and 3 blue balls. A school needs 15 blue balls. How many red and green balls will they get?

red:

Green:

Section 2

y = 2x + 3

If x = 6, what is y?

If y = 5, what is x?

Section 3

Calculate:

15% of £45 =

70% of £64 =

Section 4

Calculate:

$\frac{1}{3} + \frac{1}{6} =$

$\frac{3}{4} - \frac{1}{8} =$

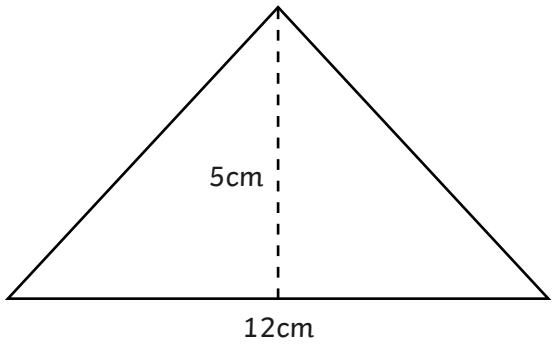
Section 5

There are 30 people in a cinema. Adults pay £9 and children £6.50. The takings are £237.50. How many children are in the cinema?

Section 6

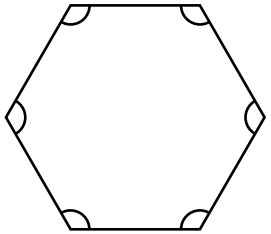
Calculate the area of this triangle:

not to scale



Section 7

Calculate the angles in this regular hexagon:



Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts in the stock room:

A shop has 45 t-shirts. 21 are in the shop. The rest are in the stock room. How many t-shirts are in the stock room?

Year 6 Maths Activity Mat: 6

Answers

Section 1

A bag of balls contains 2 red, 1 green and 3 blue balls. A school needs 15 blue balls. How many red and green balls will they get?

red: **10**

Green: **5**

Section 2

$y = 2x + 3$

If $x = 6$, what is y? **15**

If $y = 5$, what is x? **1**

Section 3

Calculate:

15% of £45 = **£6.75**

70% of £64 = **£44.80**

Section 4

Calculate:

$\frac{1}{3} + \frac{1}{6} =$ **$\frac{3}{6}$ or $\frac{1}{2}$**

$\frac{3}{4} - \frac{1}{8} =$ **$\frac{5}{8}$**

Section 5

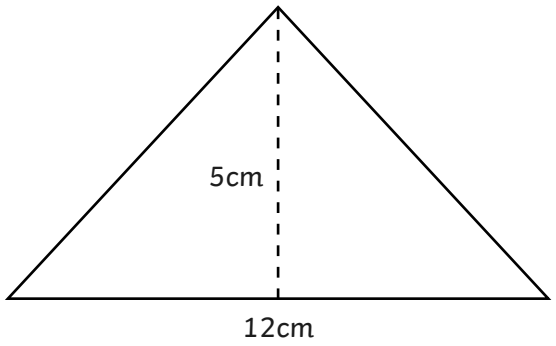
There are 30 people in a cinema. Adults pay £9 and children £6.50. The takings are £237.50. How many children are in the cinema?

13 children

Section 6

Calculate the area of this triangle:

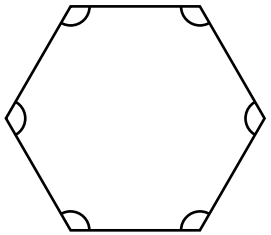
not to scale



30cm²

Section 7

Calculate the angles in this regular hexagon:



120°

Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts in the stock room:

A shop has 45 t-shirts. 21 are in the shop. The rest are in the stock room. How many t-shirts are in the stock room?

t = 45 – 21 or 45 = t + 21

Year 6 Maths Activity Mat

Section 1

Bags of marbles contain 4 blue, 2 red, 1 yellow, 3 green marbles. Alex wants 18 green marbles. How many blue, red and yellow marbles will he get?

blue: ☐ yellow: ☐

red: ☐

Section 2

$2y = x + 5$

If x = 7, what is y? ☐

If y = 3, what is x? ☐

Section 3

Calculate:

12% of £58 = ☐

87% of £142 = ☐

Section 4

Calculate:

$\frac{1}{8} + \frac{1}{4} + \frac{1}{2} =$ ☐

$\frac{2}{3} - \frac{3}{12} =$ ☐

Section 5

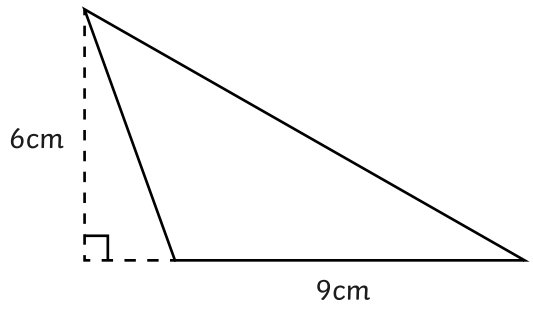
There are 54 people in a cinema. Adults pay £9.50 and children £6.50. The takings are £438. How many children are in the cinema?

☐

Section 6

Calculate the area of this triangle:

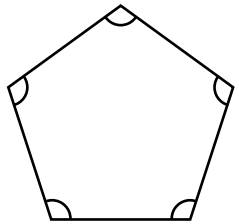
not to scale



☐

Section 7

Calculate the angles in this pentagon:



☐

Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts in the stock room:

A shop has 67 t-shirts. 26 are on the shelves, 9 are on a sale rail. The rest are in the stock room. How many t-shirts are in the stock room?

☐

Year 6 Maths Activity Mat: 6

Answers

Section 1

Bags of marbles contain 4 blue, 2 red, 1 yellow, 3 green marbles. Alex wants 18 green marbles. How many blue, red and yellow marbles will he get?

blue: **24**

yellow: **6**

red: **12**

Section 2

2y = x + 5

If x = 7, what is y? **6**

If y = 3, what is x? **1**

Section 3

Calculate:

12% of £58 = **£6.96**

87% of £142 = **£123.54**

Section 4

Calculate:

$\frac{1}{8} + \frac{1}{4} + \frac{1}{2} =$ $\frac{7}{8}$

$\frac{2}{3} - \frac{3}{12} =$ $\frac{5}{12}$

Section 5

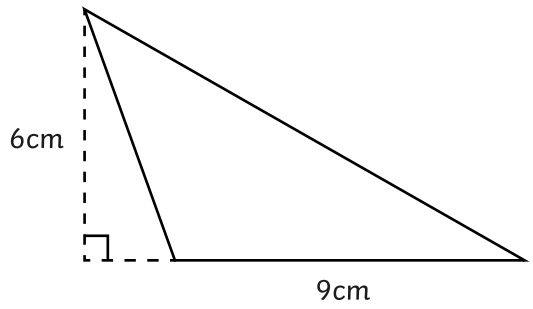
There are 54 people in a cinema. Adults pay £9.50 and children £6.50. The takings are £438. How many children are in the cinema?

25 children

Section 6

Calculate the area of this triangle:

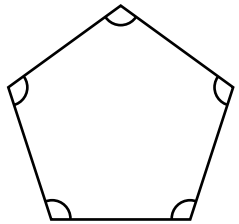
not to scale



27cm²

Section 7

Calculate the angles in this regular hexagon:



108°

Section 8

Express the answer to this word problem algebraically, using **t** to represent the number of t-shirts in the stock room:

A shop has 67 t-shirts. 26 are on the shelves, 9 are on a sale rail. The rest are in the stock room. How many t-shirts are in the stock room?

67 = 26 + 9 + t;
or
t = 67 – (26 + 9);
or
t = 67 – 26 - 9