

1.1

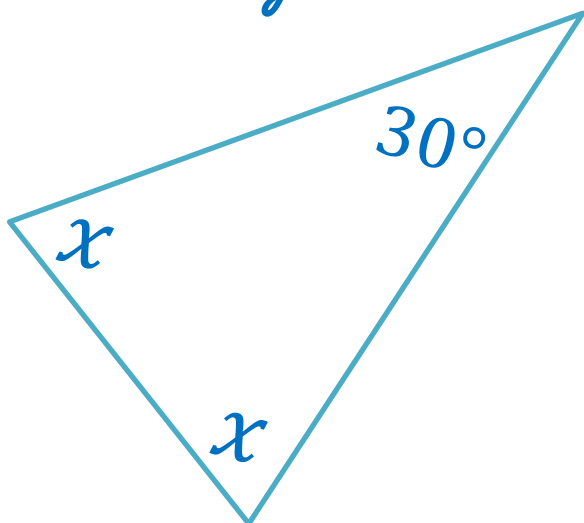
**Factorise**  
 $x^2 + 5x + 6$

**Sketch**  
 $y = 2x - 3$

The probability of snow is 0.15, what is the probability of no snow?

**Rationalise**  $\frac{2}{\sqrt{5}}$

Find the angles marked  $x$



**Simplify**  
 $\sqrt{72}$

**Solve**  
 $6p + 3 = 23$

**Make  $x$  the subject of the formula**  
 $y = 4x + 3$

**Simplify**  
 $x^7 \times x^5$

**FRACTIONS**  
 $2\frac{2}{3} + \frac{5}{9}$

Find the gradient and  $y$  intercept of the line  
 $2y = 8x - 4$

1.2

**Factorise**  
 $x^2 - 3x - 4$

**Sketch**  
 $y = 2 - 4x$

**Simplify**  
 $\sqrt{147}$

**Solve**  
 $4y - 9 = 3 + y$

**Make  $m$  the subject of the formula**  
 $p - 7 = 3 + 2m$

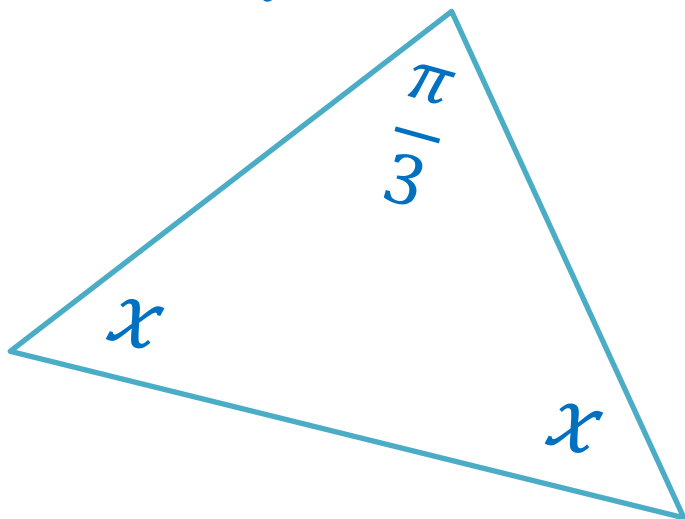
Calculate the mean:

32, 35, 48, 45

**Simplify**  
 $x^8 \div x^2$

**Rationalise**  $\frac{1}{\sqrt{3}}$

Find the angles marked  $x$



**FRACTIONS**  
 $2\frac{1}{3} - \frac{1}{5}$

Find the gradient and  $y$  intercept of the line  
 $3y = 6 + 4x$

1.3

**Factorise**

$$x^2 - 4$$

**Sketch**

$$2x + y = 4$$

**Simplify**

$$\sqrt{45} + \sqrt{18}$$

**Solve**

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

Counters –  
3 Blue, 5 Red, 6  
Yellow.

Find  $P(B \cup R)$

**Make  $y$  the subject of the formula**

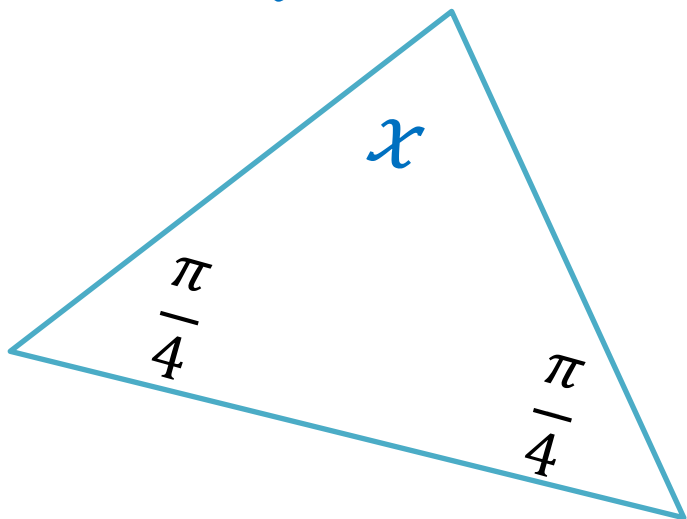
$$E = 3 - 4y$$

**Evaluate**

$$36^{\frac{1}{2}}$$

**Rationalise**  $\frac{2}{1 + \sqrt{5}}$

Find the angle marked  $x$



**FRACTIONS**

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

Find where the line  
 $4x + 5y = 20$   
crosses the  $x$ -axis

1.4

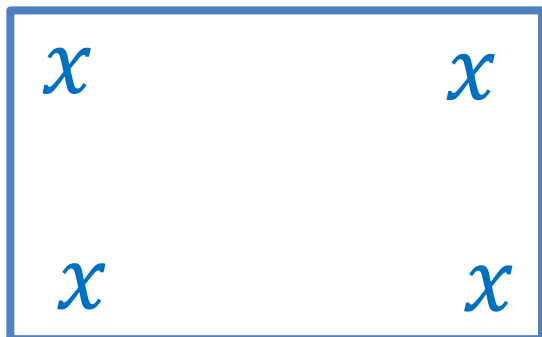
**Factorise**  
 $x^2 - 5x + 6$

**Sketch**  
 $y = x^2$

Counters –  
3 Blue, 5 Red,  
6 Yellow.  
Find  $P(Y \cup R)$

**Rationalise**  $\frac{5}{11 + \sqrt{5}}$

Find the angles marked  $x$



**Simplify**  
 $\sqrt{150} - \sqrt{50}$

**Solve**  
 $\frac{x}{4} + 5 = 6$

**Make  $p$  the subject of the formula**  
 $W = \frac{3y}{2}(p + 5)$

**Simplify**  
 $x^{\frac{1}{2}} \times x^2$

**FRACTIONS**  
 $\frac{2}{5} \div \frac{3}{4}$

Find where the line  
 $2x - 3y = 12$   
crosses the  $y$ -axis

1.5

**Factorise**  
 $x^2 - 8x + 15$

**Simplify**  $\frac{\sqrt{21}}{\sqrt{3}}$

**Sketch**  
 $y = x^3$

**Solve**  
 $2\left(\frac{m}{4} - 4\right) = 16$

Counters –  
3 Blue, 5 Red,  
6 Yellow.  
Find  $P(B')$

**Make  $r$  the subject of the formula**

$$V = \frac{1}{3}\pi r^2 h$$

**Simplify**

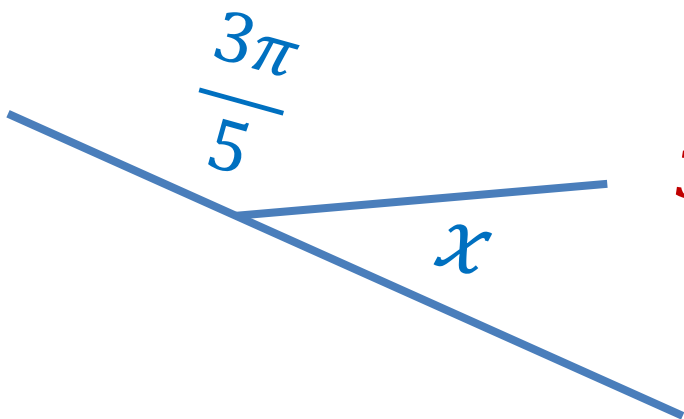
$$x^{\frac{3}{2}} \div x^3$$

**Rationalise**  $\frac{3}{5 - \sqrt{3}}$

**FRACTIONS**

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

Find the angle marked  $x$



Find where the line  
 $3y = 2x - 4$  crosses the  
coordinate axes

1.6

**Factorise**

$$4x^2 - 5$$

*Simplify*  $\frac{24\sqrt{6}}{4\sqrt{2}}$

*Sketch*  $y = \frac{1}{x}$

**Solve**

$$\frac{1}{4k} + \frac{1}{3k} = -7$$

Counters –  
3 Blue, 5 Red,  
6 Yellow.

Find  $P(Y')$

*Make  $k$  the subject of the formula*

$$p = \frac{2k + 4}{k} ?$$

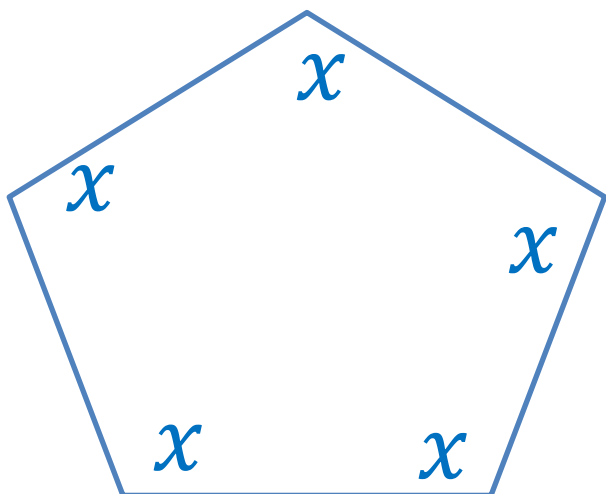
*Rationalise*  $\frac{p}{\sqrt{q}}$

*Simplify*  $\frac{2^2}{x^{\frac{1}{3}}} \times x^3$

**FRACTIONS**

$$\frac{3}{4} \div 2$$

*Find the angles marked  $x$*



*Find where the line*  
 $3x + 4y = 5$  *crosses the*  
*coordinate axes*

**Factorise**  
 $2x^2 - 9x - 5$

**Sketch**

$$y = x^2 + 2$$

**Solve**

$$\frac{10 - 4x}{6} + \frac{12 + 6x}{2} = 12$$

**Simplify**

$$(3\sqrt{7})^2$$

Counters –

3 Blue, 5 Red, 6 Yellow.

Find  $P(Y' \cap R')$

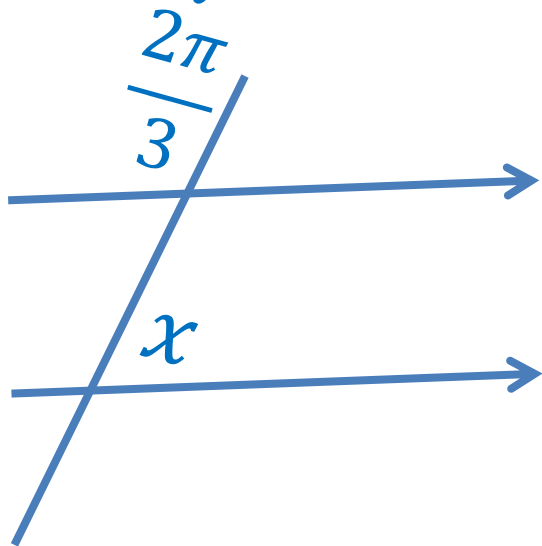
**Rationalise**  $\frac{a}{a + \sqrt{b}}$

**Make  $y$  the subject of the formula**  
 $xy - 5z = 3 - 4y$

**Simplify**

$$x^{-\frac{1}{2}} \div \frac{1}{x}$$

Find the angle marked  $x$



**FRACTIONS**

$$2 + \frac{3}{2}$$

Find where the line  
 $ay = bx + c$  crosses the  
 coordinate axes