Target 5 Sheet 04B

BossMaths

Question 1

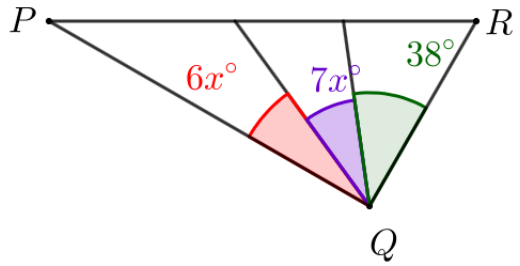
Solve by factorising:

$5\,x^2 - 2\,x - 16 = 0$

Question 2

Angle PQR is not obtuse.

Find the greatest value of x.



Question 3

Show that the sum of four consecutive integers is never a multiple of 4.

Question 4

4 blue rails have a mean length of 7 m.

4 green rails have a mean length of 6 m.

2 yellow rails have a mean length of 6 m.

Find the mean length of the 10 rails.

Target 5 Sheet 04B

BossMaths

Question 1

Solve by factorising:

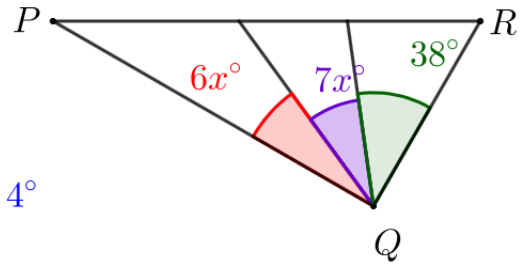
$5\,x^2 - 2\,x - 16 = 0$

$(x - 2)(5\,x + 8) = 0$

$x = 2,\ x = -\dfrac{8}{5}$

Question 2

Angle PQR is not obtuse.
Find the greatest value of x.



Question 3

Show that the sum of four consecutive integers is never a multiple of 4.

Let n be an integer.
Then $n,\ n+1,\ \ n+2,\ n+3$
are four consecutive integers.
These sum to $4n + 6 = 4(n + 1) + 2$,
which is never a multiple of 4.

Question 4

4 blue rails have a mean length of 7 m.

4 green rails have a mean length of 6 m.

2 yellow rails have a mean length of 6 m.

Find the mean length of the 10 rails.

6.4 m