Simplify

$$\frac{\left(y^4\right)^5}{y^6}$$

---

x is an integer.

Write down all the solutions of the inequality $3 < 2x + 1 < 11$

5.1cm

x

6.5cm
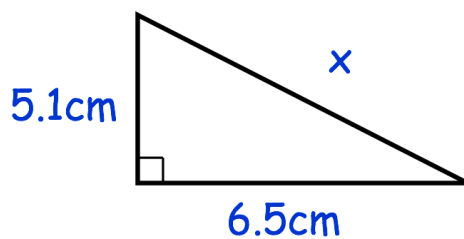
Find x

A village is 20 miles from Belfast.
Conor drives from the village to Belfast at 40mph
Kelly drives from the village to Belfast at 50mph

Work out how much longer the journey takes Conor.
Give your answer in minutes.

Belfast   20miles

P is the point with coordinates $(3, 1)$
Q is the point with coordinates $(7, a)$

The gradient of the line PQ is 2.

Find a.