

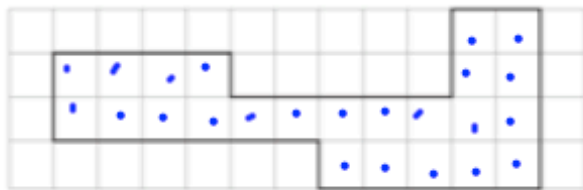


Arrange the discs so they make the smallest four-digit number.

4567

Arrange the discs to make the largest four-digit odd number

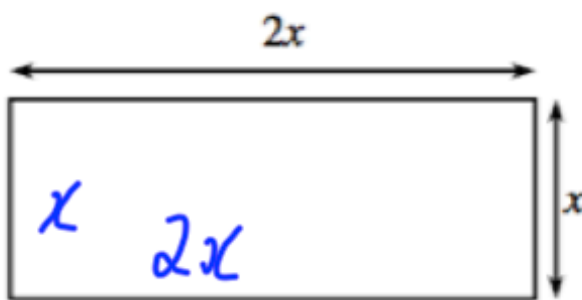
7645



This shape has been drawn on a centimetre square grid

Area

24 cm²



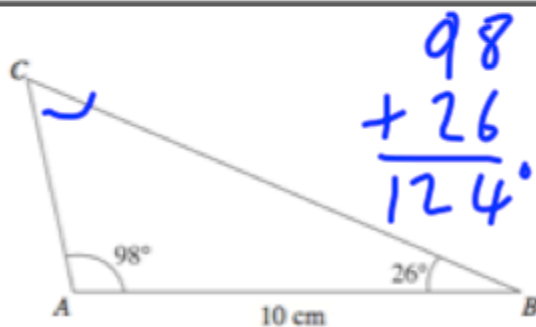
Work out the perimeter of this rectangle

6x

0.68, $\frac{33}{50}$, 67%
 68% 66%

Write in order from smallest to largest

$\frac{33}{50}$ 67% 0.68

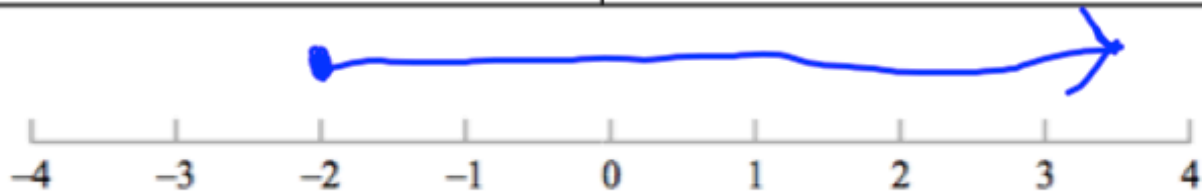


Work out the missing angle

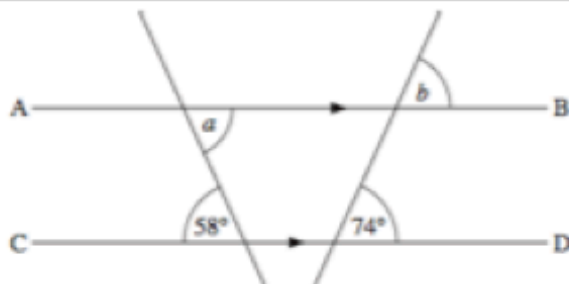
56°

$$\frac{3}{5} \div \frac{7}{8}$$

$$\frac{3}{5} \times \frac{8}{7} = \frac{24}{35}$$



Draw a line to represent $x \geq 2$



a = 58°

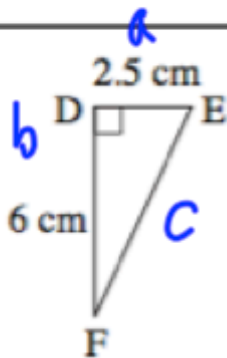
b = 74°

Give a reason for your answer for a

alternate angles

Give a reason for your answer for b

corresponding angles



Calculate the length of EF

$$a^2 + b^2 = c^2$$

$$2.5^2 + 6^2 = y^2$$

$$6.25 + 36 = y^2$$

$$y^2 = 42.25$$

$$y = 6.5 \text{ cm}$$

Write down the value of x

$$5^x = 125$$

$$x = 3$$

Write down the value of x

$$5^x = \frac{1}{125}$$

$$x = -3$$

Use trial and improvement to find the solution of

$$x^3 - 3x - 10 = 0$$

to 1 decimal place

2.6

Solve

$$2(y + 8) + 3(y - 2) = y + 6$$

$$2y + 16 + 3y - 6 = y + 6$$

$$5y + 10 = y + 6$$

$$4y = -4 \quad y = -1$$

$x \quad x^3 - 3x - 10$ Comment

1 -12 too low

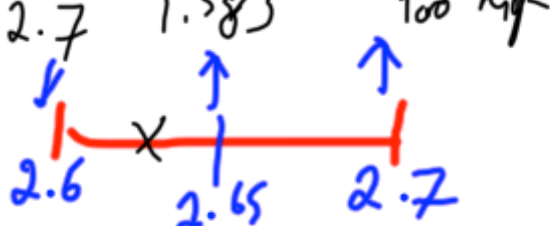
2 -8 too low

3 8 too high

2.4 -3.376 too low

2.6 -0.224 too low

2.7 1.583 too high



2.65 0.66 too high

Prove that when two odd numbers are squared and then added, the answer is always even

$$(n+1)^2 + (m+1)^2$$

$n = \text{even}$
 $m = \text{even}$

$$n^2 + 2n + 1 + m^2 + 2m + 1$$

$$n^2 + m^2 + 2n + 2m + 2$$

All even