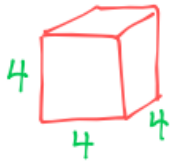
Each side of a cube is 4cm.
Calculate the volume of the cube.



$4 \times 4 \times 4 = 64\text{cm}^3$

Find $\frac{3}{8}$ of 72

$72 \div 8 = 9$
$9 \times 3 = 27$

$= 27$

Write $\sqrt{32}$ in its simplest form

$\sqrt{32} = \sqrt{16} \times \sqrt{2}$
$4 \times \sqrt{2} = 4\sqrt{2}$

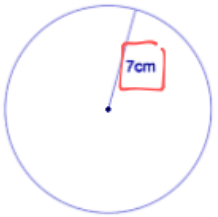
A book is reduced by 20% and now costs £4.80
What did it originally cost?

$100\% - 20\% = 80\%$

$80\% = 4.80$ (÷8)
$10\% = 0.60$ (×10)
$100\% = 6.00$

£ 6

Calculate the area in terms of π



Area $= \pi r^2$

$\pi \times 7^2 = 49\pi$

49π cm²

Calculate the area in terms of π



$\pi \times 6^2 \times \frac{120}{360}$

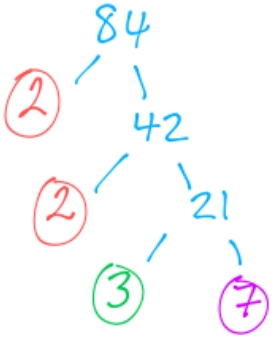
$36\pi \times \frac{1}{3} = 12\pi$

12π cm²

$\frac{2}{5} + \frac{3}{7} = \frac{7 \times 2}{7 \times 5} + \frac{3 \times 5}{7 \times 5} = \frac{14}{35} + \frac{15}{35} = \frac{29}{35}$

$\frac{5}{6} \div \frac{4}{9} \quad \frac{5}{6} \times \frac{9}{4} = \frac{5 \times 9}{6 \times 4} = \frac{45}{24} = 1\frac{21}{24} = 1\frac{7}{8}$

Write 84 as a product of prime factors



$2 \times 2 \times 3 \times 7$ or $2^2 \times 3 \times 7$

Evaluate $16^{1/2}$

$\sqrt{16} = 4$

Evaluate 8^{-1}

$\frac{1}{8}$

Evaluate $\left(\frac{3}{5}\right)^{-1}$

$\frac{5}{3}$

$y = 3x + 5$ (can be anything)

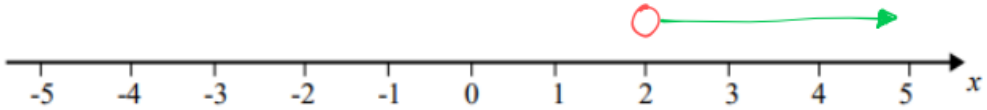
Equation of a line that is parallel $y = 3x + 10$

Equation of a line that is perpendicular $y = -\frac{1}{3}x + 10$

Evaluate $\left(\frac{25}{16}\right)^{\frac{3}{2}}$

$\left(\frac{\sqrt{25}}{\sqrt{16}}\right)^3 = \left(\frac{5}{4}\right)^3 = \frac{125}{64}$

On the number line show the inequality $x > 2$



$1 \leq y < 5$ where y is an integer.
Write down all the possible values of y.

not 5 as less than 5

1, 2, 3, 4, ~~5~~

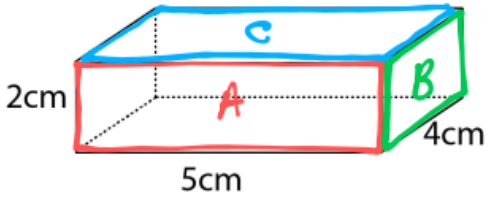
Solve $5x - 9 < 44$

$5x < 53$

$x < \frac{53}{5}$

$x < 10.6$

Calculate the surface area and volume of this cuboid.



A = 2 x 5 = 10
B = 2 x 4 = 8
C = 5 x 4 = 20
38 x 2 =

Surface Area 76cm²

Volume 2x5x4 = 40cm³

Solutions by
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Simplify

$$\frac{x^2 + x - 30}{x^2 - 12x + 35}$$

$$\frac{(x+6)(x-5)}{(x-7)(x-5)} = \frac{x+6}{x-7}$$

Simplify

$$\frac{8}{5x} + \frac{3x}{4}$$

$$= \frac{4 \times 8}{4 \times 5x} + \frac{3x \times 5x}{4 \times 5x} = \frac{32}{20x} + \frac{15x^2}{20x} = \frac{32 + 15x^2}{20x}$$

Write 2673 in standard form

2.673×10^3

Write 3.45×10^{-3} as a normal number

0.00345

Give your answer in standard form $(6 \times 10^5) + (8 \times 10^5)$

$(6+8) \times 10^5 = 14 \times 10^5 = 1.4 \times 10^6$