

MATHS TEACHER HUB
GCSE Higher revision sheet - 5

1. $\frac{2}{5}$ of a gymnastics team are boys.

Write down the ratio of boys to girls.

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2. Convert 750ml to litres.

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3. Simplify

$$h^{-5}$$

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4. (a) Convert 2759000 to standard form.

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- (b) Convert 3.5×10^{-5} to an ordinary number

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5. Expand

$$2\frac{1}{3} - \frac{4}{5}$$

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6. Rationalise

$$\frac{5}{2\sqrt{3}}$$

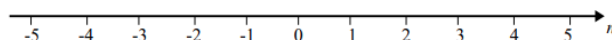
7. Make x the subject.

$$a = \frac{x+1}{x-2}$$

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8. On the number line show

$$-1 \leq \frac{n+1}{2} < 2$$



9. A jacket has been reduced by 15% during the week. On the weekend it is then reduced by a further 10%. What % has the jacket been reduced by?

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10. Solve these simultaneous equations

$$2x + y = 1$$

$$x - y = 5$$

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11. Express as a single fraction

$$\frac{1}{x+1} + \frac{6}{x-2}$$

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12. Factorise fully $25y^2 - 81$

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13. The area of a circle is 176.7cm^2 . Work out the diameter of the circle.

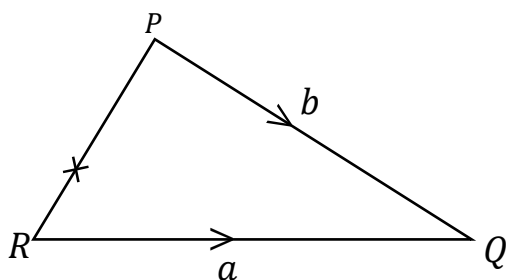
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14. Louise is placing \$750 into a savings account offering 1.6% compound interest for the first year, then 0.9% the years after. How much will she have after 3 years?

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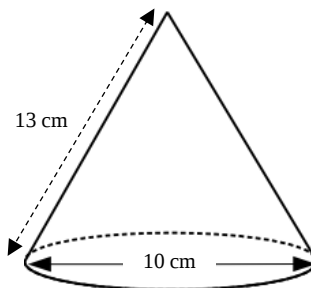
15. $RX:XP = 1 : 2$

Work out the vector of QX



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16. Work out the volume of the cone



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

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