Create the equations and then solve them! Highlight for solutions.

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| A swimming pool has twenty thousand litres of water in it. If water is pumped out at a rate of **P** litres per hour, the pool will be drained in seven hours. What is the pumping rate? | A circle has a diameter of **D** centimetres. Its circumference is one meter. Determiner the length of the diameter. |
| EQ: $Initial volume - \#hours×pump rate = Final volume$ $20 000 - 7P = 0$ | EQ: $Circumference = π × diameter$ $1 = πD$ |

Create the equations and then solve them!

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| Bob goes for a run at a speed of **S** metres per second. Jogging at this speed, he will run a five-kilometre race in twenty-seven minutes. Determine his speed. | A circle has an area of forty-five square centimetres and a radius of **R** centimetres. Determine the length of its radius |
| EQ: $5km = 5000m$ $27min = 1620s$$ Distance = speed × time$ $5000m = S × 1620$ | EQ: $Area of Circle = π×radius^{2}$ $45cm^{2} = πR^{2}$$$ |

Create the equations and then solve them!

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| Mr. Ridge eats one-hundred grams of pasta each day, except on Taco Tuesdays. How much pasta does Mr. Ridge eat in a year? | A right triangle’s hypotenuse is 1.3 metres and one of its legs has length ninety-eight centimetres. Determine the length of the other leg. |
| EQ: $Total = 365 days in a year ×(6 out of 7 days) ×daily consumption$$Total = 365 ×6/7 ×100g$ | EQ: $Pythagorean Theorem: $$LegA^{2} + LegB^{2} = HypotenuseC^{2}$ $ 0.98^{2} + B^{2} = 1.3^{2}$ |