Daily Practice 5.10.2017

Q1. Solve the equation $7(2x + 5) - 3x = 10x - 1$

$14x + 35 - 3x = 10x - 1$

$11x + 35 = 10x - 1$

$x = -36$

Q2. Calculate the length of the missing side

$\tan 54° = \frac{x}{16}$

$16 \tan 54° = x$

$x = 22.02\text{cm}$ (2d.p)

Q3. Rearrange the formula $V = \frac{4}{3}\pi r^3$ such that r is the subject

$3V = 4\pi r^3$

$\frac{3V}{4\pi} = r^3$ $r = \sqrt[3]{\frac{3V}{4\pi}}$

Q4. Calculate the mean, median, mode and range of

2, 4, 5, 7, 7, 8, 9, 10

Mean $= \frac{52}{8} = 6.5$ Mode $= 7$ Range $= 10 - 2 = 8$ Median $= \frac{7+7}{2} = 7$

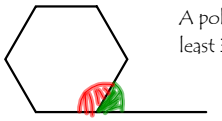
Today we will be learning about angles in polygons.

Decide on groups of 4 for Famous Mathematicians.

Acquire material in your own time to create a poster all about a Famous Mathematician.

You will be presenting the poster to the class.

Angles in Polygons



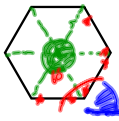
A polygon is an enclosed 2D shape with at least 3 straight sides.

Interior angle

Exterior Angle

(Regular Polygons - all equal sides)

E.g. Hexagon

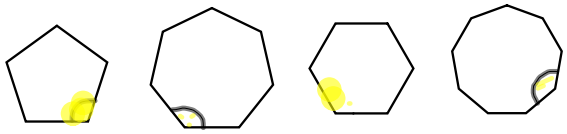


$360° \div 6 = 60°$

$180° - 60° = 120°$ = Interior angle

Exterior angle $= 180° - 120° = 60°$

(i) Calculate the interior angle (shaded angle) for each



(ii) Calculate the exterior angle for the above polygons