50.)　　$t^2 = \dfrac{d^3}{216}$　　　$d = 8.4$

P
E
M D
A S

$t^2 = \dfrac{(8.4)^3}{216} = \dfrac{592.704}{216}$

$t^2 = 2.744$

$\sqrt{t^2} = \sqrt{2.744}$

$t = 1.656$

$t \approx 2 \text{ hrs.}$

$\dfrac{D}{t^2} \Big| \dfrac{u}{\sqrt{t^2}}$

58.

$t =$ age of tools in Tanzania

$(2,500,000)$  $2.5$ million $= 700,000 + t$
$\phantom{(2,500,000)\ }\underline{-700,000 \phantom{ = 700,000}-700,000}$
$\phantom{(2,500,000)\ \ \ }1,800,000 \phantom{xxx} = t$
$\phantom{(2,500,000)\ \ \ \ \ }1.8$ million yrs

28.)     −108.6
        rational

Rational
  I
    w
      c
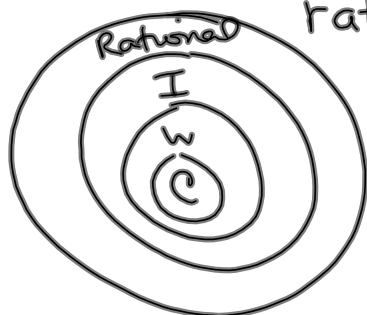
# 3-4 Pythagorean Theorem
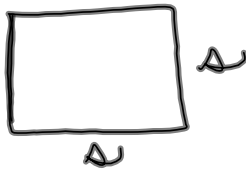
Squares = $4s$ = Perimeter
$s^2$ Area

$a =$ ⌂ 3    $A=9$    $3^2=9$    $9$
$b =$ △ 4    $A=16$    $4^2=16$    $+16$ Sum
$c =$ ⌂= 5    $A=25$    $5^2=25$    $\overline{25}$ = area of larger square

⌂= 5    $5^2=25$    $25$
⌂= 12    $12^2=144$    $+144$
⌂= 13    $13^2=169$    $\overline{169}$ = 169 large sq.

leg · hypotenuse  Triangle that has 1 right angle.
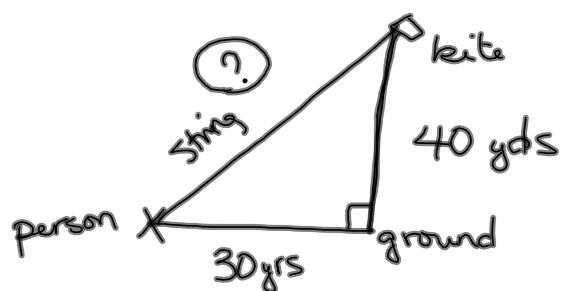90°
leg    leg = Side that make the right angle
(a) (b)
(c)
hypotenuse = the longest side of a rt. triangle
(side opposite the right angle)
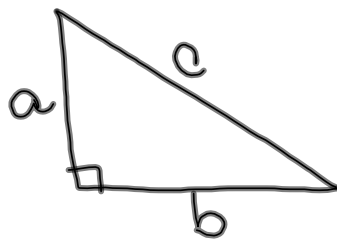
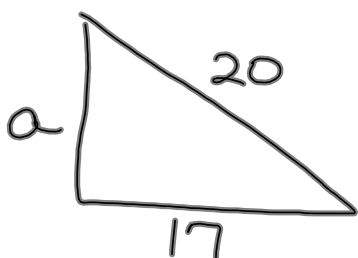$a^2 + b^2 = c^2$
$9 + 16 = 25$    Example:
$3^2 + 4^2 = 5^2$

$$30^2 + 40^2 = c^2$$
$$900 + 1600 = c^2$$
$$2500 = c^2$$
$$\sqrt{2500} = \sqrt{c^2}$$
$$50 = c$$
$$\text{yds}$$

$$a^2 + b^2 = c^2$$
$$9^2 + 12^2 = c^2$$
$$81 + 144 = c^2$$
$$225 = c^2$$
$$\sqrt{225} = \sqrt{c^2}$$
$$15 \text{ inches} = c$$

$$a^2 + b^2 = c^2$$
$$16^2 + 12^2 = c^2$$
$$256 + 144 = c^2$$
$$\sqrt{400} = \sqrt{c^2}$$
$$20 = c$$
$$m$$

$$100^2 + 200^2 = c^2$$

$$10,000 + 40,000 = c^2$$

$$\sqrt{50,000} = \sqrt{c^2}$$

$$c = 223.6 \, mm$$

20

$a$

17

$$a^2 + 17^2 = 20^2$$

P. 135

# 4, 5, 6, and 8