1. Two classes, 1st and 2nd hours, are trying to raise some money for charity. After one day 1st hour has $5.30 and 2nd hour has $3.65. First hour averages $0.40 a day after the first day and 2nd hour averages $0.55 a day.

Write and solve an equation to find the number of days it will take for the two classes to end up with the same amount of money.

first hour: $5.30 + .40D$ = 2nd hour: $3.65 + .55D$

$-.40D \quad -.40D$

$5.30 = 3.65 + .15D$

$-3.65 \quad -3.65$

$1.65 = .15D$

$\frac{1.65}{.15} = \frac{.15D}{.15}$

$D = 11$ days

2. Find the exact solution to this equation:

$60\left(\frac{7}{12} + \frac{2}{3}m - \frac{1}{6}\right) = \left(\frac{43}{30}\right)60$

$35 + 40m - 10 = 86$

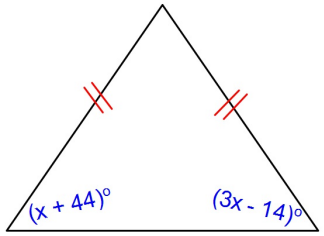
$40m + 25 = 86$

$-25 \quad -25$

$\frac{40m}{40} = \frac{61}{40}$

$m = \frac{61}{40}$

Write an equation and solve it in order to find the value of x.



This is an isosceles triangle because it has two equal sides. The angles opposite the equal sides are also equal:

$x + 44 = 3x - 14$

$-x \quad -x$

$44 = 2x - 14$

$+14 \quad +14$

$58 = 2x$

$\frac{58}{2} = \frac{2x}{2}$

$x = 29$

1. Solve for Q

$\frac{17}{23} = \frac{23Q}{23}$

$Q = \frac{17}{23}$

1. Solve for L

$\frac{A}{W} = \frac{LW}{W}$

$\frac{A}{W} = L$

Don't use a calculator!

2. Solve for W

$$13 = 5W + \sqrt{3}$$
$$-\sqrt{3} \qquad\quad -\sqrt{3}$$
$$\frac{13-\sqrt{3}}{5} = \frac{5W}{5}$$

$$W = \frac{13-\sqrt{3}}{5}$$

2. Solve for x

$$y = mx + b$$
$$-b \qquad -b$$
$$\frac{y-b}{m} = \frac{mx}{m}$$

$$x = \frac{y-b}{m}$$