Quick Quiz 10082019

Name.....

Periods.....

Solve these equations:

1.

$$5x + 2 = 6x - 4$$

2.

$$3x + 2 + 5x = x + 44$$

3.

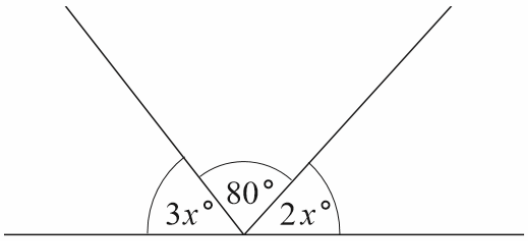
$$3x + 2 = x - 8$$

4.

$$6x - 10 = 2x - 14$$

5.

The diagram below shows three angles on a straight line:

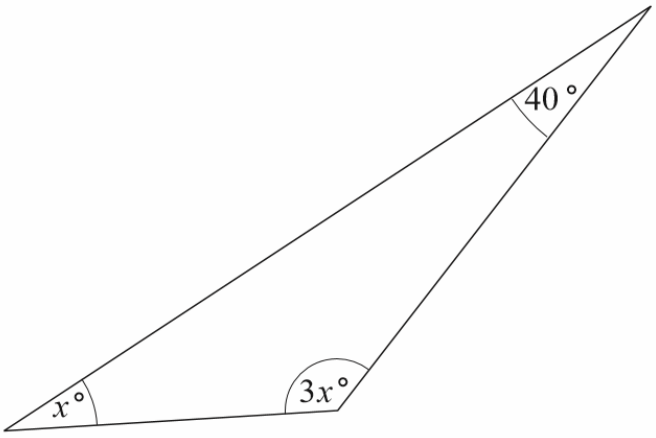


(a) Write down an equation and use it to find x.

(b) Write down the sizes of the two unknown angles and check that the three angles shown add up to 180 °.

6.

Use an equation to find the sizes of the unknown angles in this triangle:



7.

Karen thinks of a number, multiplies it by 3 and then adds 10. Her answer is 11 more than the number she thought of. If x is her original number, write down an equation and solve it to find x.

8.

$$\frac{x}{2} + 4 = 5$$

9.

$$x - 22 = -4$$

10.

You ask a friend to think of a number. He then multiplies it by 5 and subtracts 7. He gets the answer 43.

(a) Use this information to write down an equation for x, the unknown number.

(b) Solve your equation for x.

Bonus Question

If f(x)=x^2+2x-8.

What are the zeros(roots) of the equation?
What is the vertex of the equation

PARCC
Partnership for Assessment of Readiness for College and Careers

High School Mathematics Assessment Reference Sheet

1 inch = 2.54 centimeters
1 meter = 39.37 inches
1 mile = 5280 feet
1 mile = 1760 yards
1 mile = 1.609 kilometers

1 kilometer = 0.62 mile
1 pound = 16 ounces
1 pound = 0.454 kilograms
1 kilogram = 2.2 pounds
1 ton = 2000 pounds

1 cup = 8 fluid ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts
1 gallon = 3.785 liters
1 liter = 0.264 gallons
1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d \ \ or \ \ C = 2\pi r$
General Prisms	$V = Bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pyramid	$V = \frac{1}{3}Bh$

Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Arithmetic Sequence	$a_n = a_1 + (n-1)d$
Geometric Sequence	$a_n = a_1 r^{n-1}$
Geometric Series	$S_n = \frac{a_1 - a_1 r^n}{1-r}$ where $r \neq 1$
Radians	1 radian $= \frac{180}{\pi}$ degrees
Degrees	1 degree $= \frac{\pi}{180}$ radians

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