Solving for a Variable

7th Grade Math

Name:_____

Solve for the indicated variable:

1. $st = 6$ for s

2. $m - 4n = 8$ for m

3. $\dfrac{f + 4}{g} = 6$ for f

4. $c = \dfrac{10}{a}$ for a

5. $\dfrac{m}{n} = p$ for n

6. $\dfrac{x - 2}{y} = z$ for y

7. $s = 180n - 360$ for n

8. $PV = nRT$ for R

9. $3x+y=2$ for y

10. $\dfrac{5}{b}=17x$ for b

11. The equation Force = mass x acceleration (F = ma) shows us that the acceleration of an object is directly proportional to the force acting of the object. Solve the equation F = ma for "a." Then find the acceleration of a 2 kg ball pushed forward with a force of 80 N.

12. The equation Pressure = Force ÷ Area $(P=\dfrac{F}{A})$ shows us that pressure and area are inversely related. Solve the equation $P=\dfrac{F}{A}$ for "F." Then find the force needed create a pressure of 100 Pa over an area of 0.5 m².