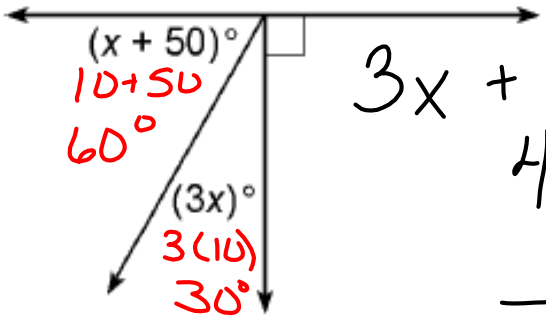
Do Now

1) Find the value of x
2) Find the degree measure of each angle



$10+50$
60°
$3(10)$
30°

$3x + x + 50 = 90$
$4x + 50 = 90$
$-50 \quad -50$
$\frac{4x}{4} = \frac{40}{4}$
$x = 10$

Jan 25-12:23 PM

Homework Answers

1) $\angle PQR = 109$

2) $m\angle 3 = 66$

3) $m\angle L = 124$

4) $m\angle 1 = 132$
$m\angle 2 = 48$

5) $m\angle 1 = 60$
$m\angle 2 = 30$

6) $m\angle 1 = 79$
$m\angle 2 = 79$

7) $x = 4$

8) $x = 6$

Jan 10-6:51 AM

If ∠1 and ∠2 are supplementary angles and The m∠1 = 7x - 4° and m∠2 = 12x + 13° . Find the m∠1 & m∠2.

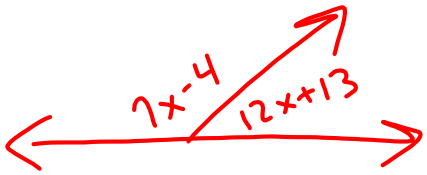
$7x-4+12x+13=180$

$19x+9=180$

$-9 \quad -9$

$\frac{19x}{19} = \frac{171}{19}$

$x=9$



$m\angle 1 = 7x-4$

$7(9)-4$

$63-4$

$m\angle 1 = 59^\circ$

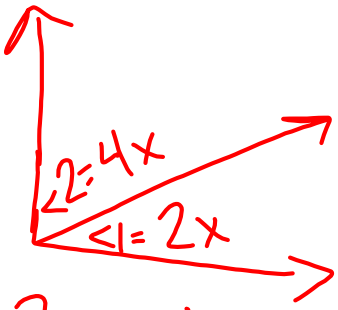
$m\angle 2 = 12x+13$

$12(9)+13$

$m\angle 2 = 121^\circ$

Jan 8-5:10 PM

If ∠1 and ∠2 are complementary and their measures are in the ratio of 2:4. Find the m∠1 & m∠2.



$2x+4x=90$

$\frac{6x}{6} = \frac{90}{6}$

$x=15$

$m\angle 1 = 2x$

$=2(15)$

$m\angle 1 = 30^\circ$

$m\angle 2 = 4x$

$4(15)$

$m\angle 2 = 60^\circ$

Jan 9-6:47 AM

If $\angle 1$ and $\angle 2$ are complementary and their measures are in the ratio of 4:5. Find the $m\angle 1$ & $m\angle 2$.

$4x + 5x = 90$

$9x = 90$

$x = 10$

$m\angle 1 = 4x$

$= 4(10)$

$m\angle 1 = 40°$

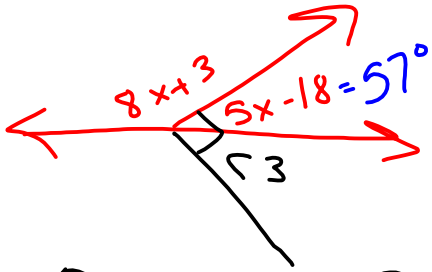
$m\angle 2 = 5x$

$= 5(10)$

$m\angle 2 = 50°$

Jan 9-6:47 AM

$\angle 1$, $\angle 2$, and $\angle 3$ are adjacent angles, with $\angle 1$ supplementary to $\angle 2$ and $\angle 2$ complementary to 3. If $m\angle 1 = (8x+3)°$ and $m\angle 2 = (5x-18)°$, find $m\angle 3$.



$8x + 3 + 5x - 18 = 180$

$13x - 15 = 180$

$+15 \quad +15$

$\frac{13x}{13} = \frac{195}{13}$

$x = 15$

$m\angle 2 = 5x - 18$

$= 5(15) - 18$

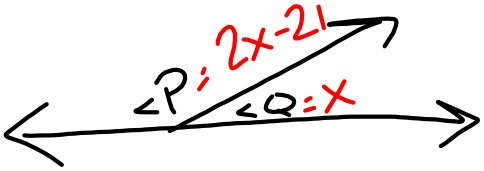
$m\angle 2 = 57°$

$m\angle 3 = 90 - 57$

$m\angle 3 = 33°$

Jan 9-10:29 PM

∠P and ∠Q are supplementary angles. If m∠P is 21 degrees less than twice the measure of ∠Q, find the measure of each angle.



$2x-21+x=180$

$3x-21=180$

$+21 \quad +21$

$\frac{3x}{3} = \frac{201}{3}$ $x=67$

$\angle Q = 67°$

$\angle P = 2x-21$

$2(67)-21$

$\angle P = 113°$

Jan 10-6:36 AM

If ∠1 and ∠2 are supplementary and their measures are in the ratio of 5:7. Find the m∠1 & m∠2.

$5x+7x=180$

$\frac{12x}{12} = \frac{180}{12}$

$x=15$

$m\angle 1 = 5x$

$= 5(15)$

$m\angle 1 = 75°$

$m\angle 2 = 7x$

$= 7(15)$

$m\angle 2 = 105°$

Jan 9-6:47 AM