CUNY Problem set #4 (To be used before Final)

Math 020,College of Staten Island

Show all the work and circle the correct answer:

1) Solve: $4x^2$ -25= 0

a) x=5/2 b) x= -5/4 or x=5/4 c) x= -5/2 or x=5/2 d) x= -2/5 or x=2/5

2) Solve: (2x+3)(x-8)=0

a) X=-3 or x= -8 b) x= -3/2 or x= 8 c) x= 3/2 0r x= -8 d) x= - 2/3 or x=8

3) Solve: $5n^2$+ 15n =0

a) n= -3 b) n=0 or n= -3 c) n=3 d) n=0 or n=3

4) Solve for all values of t: $6t^2$=144

a) t= $2\sqrt{6}$ b) t=0 or t=24 c) t= -12 or t= 12 d) t= - $2\sqrt{6}$ or t= $2\sqrt{6}$

5) Solve for all values of x: $8x^2$ =36 x

a) X= 9/2 b) x=0 or x= 9/2 c) x= - 9/2 or x= 9/2 d) x=0 or x= 2/9

6) $6\sqrt{2}$ - $\sqrt{12}$ +5 $\sqrt{8}$

a) $16\sqrt{2}$ - $2\sqrt{3}$ b) $16\sqrt{3}$ - $3\sqrt{2}$ c) $20\sqrt{2}$ d) $4\sqrt{2}$ - $2\sqrt{3}$

7) $\sqrt{3}$ (4 -$2\sqrt{6}$)

a) $4\sqrt{3}$ -6 $\sqrt{2}$ b) $2\sqrt{3}$ -6 $\sqrt{2}$ c) -$2\sqrt{6}$ d) $4\sqrt{3}$ -6

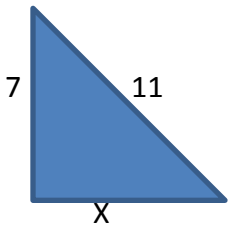
8) $\frac{(5\sqrt{24})(3\sqrt{45})}{\sqrt{6}}$

a) $30\sqrt{45}$ b) $180\sqrt{5}$ c) $90\sqrt{5}$ d) $60\sqrt{15}$

9) $-5\sqrt{3} - \sqrt{8} + 4\sqrt{18} - 2\sqrt{12}$

a) $3\sqrt{3} - 8\sqrt{2}$ b) $-4\sqrt{21}$ c) $5\sqrt{2} - 9\sqrt{3}$ d) $10\sqrt{2} - 9\sqrt{3}$

10)Find the missing side of the triangle below:



a) $x= 2\sqrt{6}$ b) $x=2\sqrt{2}$ c) $x=6\sqrt{2}$ d) $x= 3\sqrt{3}$

10) Olivia runs 10 meters diagonally across a rectangular field that has a width of 6 meters. Find the length of the rectangular field.

a) 12 meters b) 8 meters c) 4 meters d) 16 meters