

Good Morning!

Please put up your phones, grab a chromebook, take your seats, and have out your homework.

41. A type of mobile phone produced by NOKIA must be less than 8 ounces in weight with a tolerance of 0.3 ounces. The mobiles that are not within the tolerated weight must be recycled. Which of the following inequalities can be used to assess which mobiles are tolerable? (w is the weight of the mobiles).

$$|w - 8| \leq 0.3$$

~~a~~ $|w - .3| \leq 8$

~~b~~ $|w - .3| \geq 8$

c $|w - 8| \leq .3$

d $|w - 8| \geq .3$

Evaluate $f(-2)$ if $f(x) = x^2 + 3$

$$\begin{aligned} &(-2)^2 + 3 \\ &4 + 3 = 7 \end{aligned}$$

7. If $f(x) = -4x - 5$ and
 $g(x) = 3 - x$,
what is $g(-4) + f(1)$?

a 7

b -2

c -9

d -10

$$g(-4) = 3 - (-4) \\ = 7$$

$$f(1) = -4(1) - 5 \\ = -9$$

$$7 + -9$$

40. The radius of the gears produced at a factory must be 6 inches in length with a tolerance of 0.1 inches. The gears with radius beyond the tolerated lengths will be thrown away. Which of the following inequalities can be used to assess which gears are eligible? (x is the length of the radius)

a $|x - 6| \leq 0.1$

b $|x - 6| \geq 0.1$

~~c~~ $|x - 0.1| \leq 6$

~~d~~ $|x - 0.1| \geq 6$

$$|x - 6| \leq 0.1$$

32. Which compound inequality involves $<$, \leq when solving absolute value inequalities?

a and

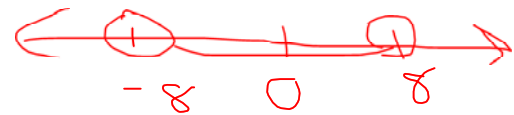
b or



31. $|2x + 12| < 8$

Which is the correct first step?

- a $2x + 12 < 8$ and $2x + 12 > -8$
- b $2x + 12 < 8$ or $2x + 12 > -8$
- c $2x + 12 < 8$ and $2x + 12 < -8$
- d $2x + 12 < 8$ or $2x + 12 > -8$



6. Evaluate $f(-2)$ if $f(x) = x^2 + 3$

- a -1
 - b 1
 - c 7
 - d -7
- $(-2)^2 + 3$
 $4 + 3$

31. $|2x + 12| < 8$
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