

**DCA (A.CED.A) Review #1**

**For problems 1 and 2, solve for x. Show all required work.**

**1)**  $7x - 12 = -3x + 48$

Answer: \_\_\_\_\_

**2)** What is the solution to the inequality

$$4(6 - 2x) > 32$$

**a.**  $x < -1$

**b.**  $x < 1$

**c.**  $x > -1$

**d.**  $x > 1$

Answer: \_\_\_\_\_

**3)** What is the x-intercept for the equation  $-8x - 12y = 24$ ? Show your work.

Answer:  $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

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**4)** Naala has \$1,200 in her savings account and is withdrawing \$25 per week. Write an equation that represents this situation, where  $y$  is the amount Naala has in her savings account after  $x$  weeks.

Answer: \_\_\_\_\_

**5)** Franklin the Ferret is in his den, which is 20 feet below ground level. He starts up the tunnel toward the surface, and is climbing at a rate of 2 feet per second. Write an equation that represents this situation, where  $y$  is Franklin's position relative to ground level after  $x$  minutes.

Answer: \_\_\_\_\_

**6)** Cate and Paulette have invited 50 people to their wedding so far, and plan to invite at most  $y$  people. They are sending out 10 wedding invitations per day. Write an inequality that represents this situation, where  $x$  is the number of days.

Answer: \_\_\_\_\_

**7)** Harvey has \$1,200 in his savings account and is withdrawing \$25 per week. He needs to keep at least  $y$  dollars in his account. Write an inequality that represents this situation, where  $x$  is the number of weeks.

Answer: \_\_\_\_\_

*Exemplary - This problem will take you to Exemplary if you are Meeting on the rest of the test.*

**8) Solve. Show all required work.**

$$|-2x + 10| < 22$$