**Math Whiz: Unit 4 Equations & Inequalities**

**One-Step Equations**

1. Solve the following equation: $a-32=47$

A. 15

B. 77

C. 79

D. 81

1. $Solve for c. \frac{c}{5}=65$

A. 13

B. 60

C. 325

D. 335

1. Solve for r: 1.2r = 24

 A. 2

 B. 12

 C. 20

 D. 200

1. Franklin paid $152 for 8 DVDs. Each DVD was the same price. Which shows the equation that represents the situation and price of each DVD?

A.) $\frac{d}{8}=152; \$1,216 per DVD $ $B.) d-8=152; \$160 per DVD$

C.) d + 8 = 152; $144 per DVD

D.) 8d = 152; $19 per DVD

1. Gavin worked 16 hours last week and earned $192. The equation 16d = 192 can be used to find d, the number of dollars earned per hour. What is Gavin’s hourly wage?

A. $10.20

B. $11.50

C. $12.00

D. $14.75

**Inequalities**

1. Which inequality is shown on the number line? 

A. x > 3

B. x > 3

C. x < 3

D. x < 3

1. Which inequality is shown on the number line?



A. x > 2

B. x > 2

C. x < 2

D. x < 2

1. When the temperature drops below 15 degrees Celsius in a building, the furnace turns on. Which inequality statement represents the temperatures the furnace turns on?

A. t < 15

B. t > 15

C. t ≠ 15

D. t > 15

1. Cooper spent at least $25 at a music concert. Which inequality represents the amount of money Cooper spent?

A. c > 25

B. c > 25

C. c < 25

D. c < 25

1. Which of the following values is **NOT** a solution of $x-4<15?$

A. 0

B. 15

C. 18

D. 19

**Relationship Between Independent & Dependent Variables**

 11. The table below shows song downloads and

 total cost.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Songs (x) | 3 | 5 | 8 | 10 |
| Total Cost (y) | $4.50 | $7.50 | $12.00 | $15.00 |

Which equation represents the relationship

 between the total cost (y) and songs

 downloaded (x)?

 A. y = 1.5x

 B. y = x + 1.5

 C. x = 1.5y

 D. y = 2.5x

 12. Which ordered pair is a solution to the equation

 ?

 A. (0, 0) B. (5, 3) C. (2, 10) D. (15, 39)