|  |
| --- |
|  |

|  |
| --- |
| GED/HSE Class 23 |
| GED Practice Set 1 |
| 1-12 |

|  |
| --- |
| Kevin Adams |

1. Match the following equations with their solutions.

**Questions 2-4 refer to the following menu.**

|  |  |
| --- | --- |
|  |  |
| Bacon and Egg |  $1.99 |
| Chorizo and Potato |  $1.99 |
| Bean and Bacon |  $1.99 |
| Migas |  $2.99 |
| Picadillo |  $2.99 |

2. Irene orders two Picadillo tacos and one Bacon and Egg taco. She adds cheese to the Bacon and Egg taco. Which expression could be used to represent the cost, before tax, of Irene’s order?

(a)

(b)

(c)

(d)

**Questions 2-4 refer to the following menu.**

|  |  |
| --- | --- |
|  |  |
| Bacon and Egg |  $1.99 |
| Chorizo and Potato |  $1.99 |
| Bean and Bacon |  $1.99 |
| Migas |  $2.99 |
| Picadillo |  $2.99 |

3. Sales tax on Irene’s order is 8.25%. What is the decimal form of 8.25%?

(a) 8.25 (b) 0.825 (c) 0.0825 (d) 0.00825

4. Irene orders two Picadillo tacos and one Bacon and Egg taco. She adds cheese to the Bacon and Egg taco. Sales tax is 8.25%. After tax, what is the total cost of Irene’s order? Round your answer to the nearest cent.

(a) $0.70

(b) $8.54

(c) $9.17

(d) $15.46

5. Rounded to the nearest tenth of a square inch, what is the area of a circle with a radius of 3 inches?

(a) 3.1

(b) 9.4

(c) 18.8

(d) 28.3

**Questions 1 and 2 refer to the following pie chart.**

1. The Erdogan family has a monthly income of $5,600.00. How much do they spend on their mortgage?

(a) $30.00 (b) $168.00

(c) $1,680.00 (d) $3,000.00

2. The Erdogan family wants to change its spending habits. They would like for the amount they spend on entertainment to be the same as the amount they save, without changing anything else. What will be the new percentage for Entertainment?

(a) 7% (b) 10% (c) 13% (d) 20%

3. Which algebraic inequality represents the following?

*The product of a number and 3 is less than the sum of the same number and five.*

(a) (b)

(c) (d)

4. *Without a calculator*, evaluate the following expression.

(a) (b) (c) (d)

5. Susan is going to lay tile down in a rectangular room that measures 18 feet long by 16 feet wide. The new tile that she is using is only available in boxes that cover 20 square feet each.

 How many whole boxes of new tile will Susan need to buy in order to retile the entire room?

(a) 14

(b) 15

(c) 18

(d) 288

1. Evaluate

 if and . (Insert your answer into the box.)

2. Ernie’s Plumbing charges a base fee of $40.00 to make a house call. For any work done, they charge a rate of $25.00 per hour, plus one and a half times the cost of materials.

 Which equation below represents the total cost, , of a plumbing job that takes hours and requires dollars worth of materials?

(a)

(b)

(c)

(d)

3. What is 17% of 728? (Round your answer to the nearest tenth.)

(a) 12.38

(b) 123.7

(c) 123.8

(d) 1238

4. Dorothy takes out a 5 year loan for $14,000 at a simple interest rate of 4.5%

 Which of the following expressions represents the amount of interest Dorothy will pay over the life of the loan?

(a)

(b)

(c)

(d)

5. What is the Lowest Common Multiple of 6 and 9?

(a) 3

(b) 12

(c) 18

(d) 36

1. Using the symbols below, graph the inequality onto the number line.



2. *Without using a calculator*, evaluate this expression.

(a) 9

(b) 14

(c) 17

(d) 21

3. What is the greatest common factor of 24 and 36?

(a) 6

(b) 12

(c) 60

(d) 864

4. *Without using a calculator,* evaluate the following expression.

(a)

(b)

(c)

(d)

5. A circular garden has a straight path going from one side, through the center, and all the way to the other side. The path is 20 feet long. To the nearest square foot, how large is the garden?

 20 feet

(a)

(b)

(c)

(d)

1. What is the value of in the following equation?

(a)

(b)

(c)

(d)

2. Joey and Annie met for a lunch date. The cost of their meal, before tax and tip, was .

 After sales tax was added, they left a tip of .

 If Joey and Annie each paid for half the total cost of meal, tax, and tip, how much did each pay?

 (Round your answer to the nearest cent.)

(a)

(b)

(c)

(d)

3. *Without a calculator*, evaluate the following expression.

(a)

(b)

(c)

(d)

4. Simplify the following polynomial.

(a)

(b)

(c)

(d)

5. *Without a calculator*, multiply

(a)

(b)

(c)

(d)

1. *Without using a calculator,* place a point on the number line below to represent the location of .

2. Arrange the following decimals in order from least to greatest.

(a)

(b)

(c)

(d)

3. What is the value of in the following equation? Enter your answer into the box provided.



4. The Alcala family is ordering sod for a rectangular lawn they are having installed. The lawn is 90 feet long and 40 feet wide.

 The sod comes in pallets which hold 12 square feet of sod each.

 How many pallets of sod does the Alcala family need to order?

(a) 3

(b) 22

(c) 250

(d) 300

5. Add the following polynomials.

(a)

(b)

(c)

(d)

1. Insert the correct sign into this expression.

2. Choose the algebraic expression which represents the following description:

 *The product of a number and four is greater than or equal to the sum of the same number and two.*

(a)

(b)

(c)

(d)

3. ABC Widget Inc. sells custom widgets online. They use the following equation to calculate the total cost, , of an order for widgets:

If a customer orders 7 widgets, how much will the total cost of the order be?

(a) 27

(b) 68

(c)

(d) 92

4.

|  |  |
| --- | --- |
|  |  |
| Small |  |
| Medium |  |
| Large |  |
| Extra Large |  |

 Gary ordered a large 2-topping pizza from Pietro’s Pizzeria. Sales tax was 8.25%, and he left 5 dollars as a tip.

 Which expression below can be used to represent the total cost of Gary’s purchase?

(a)

(b)

(c)

(d)

5. Find the value of in the following equation.

1. ABC Widget Manufacturing sells its world-famous, custom widgets direct to consumers.

 It uses the formula

to determine the cost, , of an order for widgets.

 How much would ABC Widget Manufacturing charge a customer who ordered 4 widgets?

(a)

(b)

(c)

(d)

2. At Ashvin’s All Day Donut Shop, Ashvin begins baking every morning at 3:00 AM. Glazed Donuts are fresh every 2 hours, and Apple Fritters are fresh every 3 hours.

 If a customer wanted to purchase both a Glazed Donut and and Apple Fritter when they were both fresh, what is the earliest time the customer should arrive?

(a) 6:00 AM

(b) 7:00 AM

(c) 8:00 AM

(d) 9:00 AM

3. Evaluate the following expression.

(a) 2 (b) 4

(c) 6 (d) 8

4. Which equation represents the following description?

 *Two less than the product of a number and*

 *four is equal to negative ten*.

(a)

(b)

(c)

(d)

5. A cylindrical water tank is 20 feet across and 10 feet high. To the nearest cubic foot, how much water can it hold?

 10

 20

(a)

(b)

(c)

(d)

 1. Without a calculator, multiply. Insert your answer into the box provided.

2. Without a calculator, evaluate the following expression.

(a)

(b)

(c)

(d)

3. ABC Widget Manufacturing Co. uses the expression

to determine the cost of an order for widgets.

Sam’s Widget Makery charges a flat rate of $9.00 per widget.

What will be the difference in price between the two companies for an order of 9 widgets?

(a) $1.00

(b) $2.00

(c) $3.00

(d) $4.00

4. Sarai is going to be serving 5 gallons of punch at a Fourth of July celebration. She is planning on using conical paper cups, shown below.

 How many paper cups will Sarai need to serve all 5 gallons of punch?

 4 in

 6 in

(a) 10

(b) 25

(c) 46

(d) 454

5. Without a calculator, evaluate this expression.

(a)

(b)

(c)

(d)



1. At a 20%-Off-Everything sale, Jackie bought a new blouse and a new skirt. The original price of the blouse was $32.00, and the original price of the skirt was $28.00.

 Before sales tax was added, what was the total cost of Jackie’s purchase?

(a) $12.00

(b) $48.00

(c) $60.00

(d) $72.00

2. What is the value of in the following equation?

(a)

(b)

(c)

(d)

3. What is the volume of the cylinder illustrated below?

 6

 11

(a)

(b)

(c)

(d)

4. Which algebraic inequality represents the following description?

*Two more than the product of a number and 3 is less than or equal to the sum of the same number and ten.*

(a)

(b)

(c)

(d)

5. Add.

(a)

(b)

(c)

(d)

6. Which of the following expressions is undefined in the set of real numbers?

(a)

(b)

(c)

(d)

7. Evaluate

(a) (b) (c) (d)

1. A plumber charges $90.00 to make a house call. For any work performed, he charges $40.00 per hour, plus one and a quarter times the cost of materials used.

Which equation below could be used to represent the total cost, , of a plumbing job that takes hours to complete and uses dollars worth of materials?

(a)

(b)

(c)

(d)

|  |  |
| --- | --- |
|  |  |
| Meatloaf |  |
| Lasagna |  |
| Spaghetti |  |
| Rigatoni |  |

2.

***Add a drink and dessert for only $2.99!***

Jacob orders the Rigatoni Lunch Special, and adds a drink and dessert. Which expression below could be used to determine the cost of Jacob’s order after 8.25% sales tax and a 20% tip?

(a)

(b)

(c)

(d)

3. A rectangular strip of grass has an area of 600 square feet. It is 12 feet wide. How many feet long is the strip of grass?

(a) 5 (b) 50

(c) 500 (c) 552

4. Solve for .

5. What is the mean of the following data set?

(a) 5 (b) 7

(c) 8 (d)16

6. Which of the following expressions is undefined in the set of real numbers?

(a) (b)

(c) (d)

7. Without a calculator, evaluate the following expression.

(a) 4 (b) 8

(c) 12 (d) 16

8.

9. Expand the following expression.

(a) (b)

(c) (d)

1. Evaluate this expression if and

(a)

(b)

(c)

(d)

2. Rounded to the nearest tenth, what is the area of a circle with a radius of 5?

(a) 31.4

(b) 62.8

(c) 78.5

(d) 314.2

3. What is the median value of the following data set?

(a)

(b)

(c)

(d)

4. Solve for .

5. Place a point on the number line to indicate the location of

6. Which of the following expressions is undefined in the set of real numbers?

(a) (b) (c) (d)

7. Without a calculator, simplify the following expression.

(a)

(b)

(c)

(d)

8. Without a calculator, simplify the following expression.

(a) (b)

(c) (d)

9.

10. Which expression below is the same as ?

(a)

(b)

(c)

(d)

1.1.

 2. a

 3. c

 4. c

 5. b

2.1. c

 2. b

 3. a

 4. c

 5. b

3.1. 9

 2. c

 3. c

 4. c

 5. c

4.1. 

 2. a

 3. b

 4. c

 5. b

5.1. c

 2. b

 3. a

 4. b

 5. a



6.1.

 2. b

 3.

 4. d

 5. c

7.1.

 2. b

 3. b

 4. d

 5. c

7.1.

 2. b

 3. b

 4. b

 5.

8.1. c

 2. d

 3. d

 4. b

 5. a

9.1.

 2. a

 3. c

 4. c

 5. a

10.1. b

 2. b

 3. b

 4. a

 5. c

 6. b

 7. b

11.1. b

 2. d

 3. b

 4.

 5. c

 6. d

 7. d

 8. 7

 9. d

12.1. d

 2. c

 3. c

 4.

 5.

 6. d

 7. d

 8. a

 9. 2

 10. a

13.1. b

 2. c

 3. 6

 4.

 5. d

 6. b

 7. a