Prime Time

Directions:

1. Indicate the numbers between 1 and 150 that are prime by coloring them in with a colored pencil.
2. Be careful. Remember the Divisibility Rules.

Primes and Composites

Prime numbers are those numbers which are divisible by themselves and 1 ONLY. Therefore, 1, 2, 3, 5 etc. are prime. They have no factors other than 1 and the number itself.
Composite numbers are those that have factors other than 1 and the number themselves. Therefore, 4 (4 x 1 and 2 x 2) 6 (6 x 1 and 3 x 2) and 12 (12 x 1, 6 x 2, and 4 x 3) are all composite.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150

Answer Key
Prime numbers are
1
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
101
103
107
109
113
127
131
137
139
149

Seeing Red

Directions:

The object of the game is to play all the cards and be as close to zero as possible.

1. One deck of cards, 1 die
2. Start with three cards. Remaining cards are placed face down in the center.
3. Red cards are negative numbers, black cards are positive numbers.
4. Roll the dice and decide which card you will play. The face value of the card is multiplied by the number represented on the die. When you play the first card it is simply the total value of the card. When playing your second card, provide the total (what the value of the pile was + or – the total represented by the player's card.
5. Player draws a card to keep 3 in his/her hand.
6. You win if you are in the "black" (have a positive number) when all cards have been played.

Note: Tally sheets are provided. (You might want to let them have a calculator as back-up for this game.

If the pile is positive, and the player has a negative, then subtract (decreasing the positive).
If the pile is positive, and the player has a positive, then add (increasing the positive).
If the pile is negative, and the player has a negative, then add (increasing the negative).
If the pile is negative, and the player has a positive, then subtract (decreasing the negative).

Seeing Red Tally Sheet

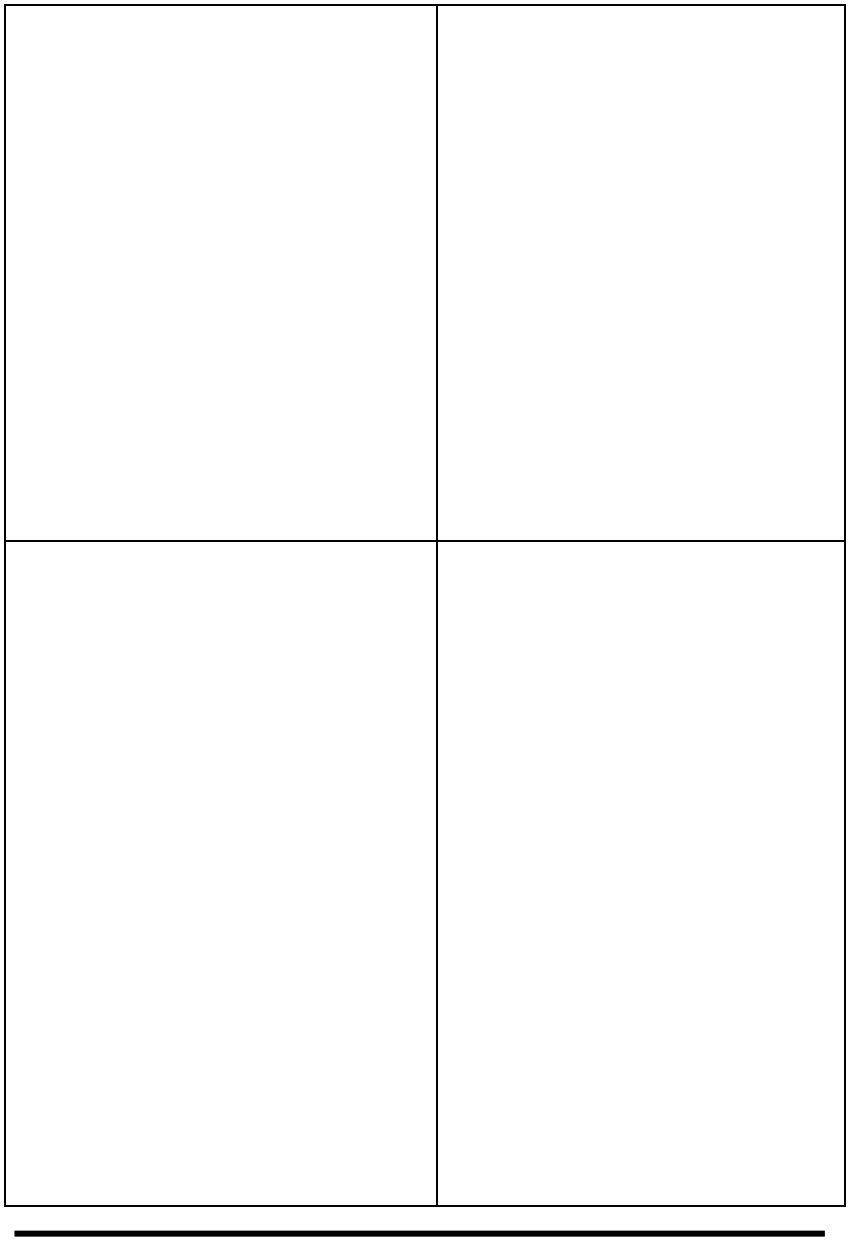
Seeing Red Tally Sheet

Decimal Slam

Directions:

1. Shuffle deck of cards and put face down
2. If you draw a face card or 10, these cards are put aside. If you draw a joker, the joker counts as a 0.
3. Player draws four cards, placing one in each of the four boxes.
4. Player multiplies the two-digit numbers together.
5. Write down the equation for the largest number.
6. Game is over when you have played 15 rounds.

Problem



x.

Tic Tac Equivalent

Directions:

1. Players each take one color of Equivalent Cards.
2. Players each arrange their cards to be in equivalent trios.
3. Play begins like Tic Tac Toe, following the description above.
4. Player who gets three color cards in a row (vertically, horizontally, or diagonally) wins

Rules:
The first column must contain a fraction card, the second column a decimal card, and the third column the percentage card.
When player one places his/her first card, the equivalence value of the row has been determined. For example, if the first person plays .5 in the center of the Tic Tac Toe, then if the second player wants to block right or left, he/she must play the fraction or % card that is equal to .5. Likewise, if the second player wants to play top left, then he/she must play a fraction card other than $\frac{1}{2}$, since that is being used in the center row.

Before playing run one set of equivalent cards on one color of card stock, and another on a second color. This way you will know who has played what marker.

Fraction	Decimal	Percent

$\frac{1}{4}$	.25	25%
$\frac{1}{2}$	.5	50%
$\frac{3}{4}$	.75	75%
$\frac{1}{8}$	.125	12.5%
$\frac{1}{3}$	.33	33%
$\frac{2}{3}$	.67	67%
$\frac{3}{8}$	.375	37.5%

5/8	.625	62.5%
7/8	.875	87.5%
1/10	.1	10%
2/5	.2	20%
3/5	.6	60%
4/5	.8	80%
1/6	.167	16.7%
5/6	.833	83.3%

Mean, Mode, Median, and Range

Directions: Draw 7 cards (exclude the joker). Place on the grid, smallest to largest. Complete the following.

List the cards smallest to largest: _____

Median: (one in the middle): _____

Mode: (cards that are alike): _____

Range: (smallest, largest): _____

Mean: (average): _____

Draw 1, Mean	
Draw 2, Mean	
Draw 3, Mean	
Draw 4, Mean	

Total	

Exactly 100

Directions:

1. Requires two-12-sided dice and two 6-sided dice.
2. Roll all four dice.
3. Try to make an equation, using addition, subtraction, multiplication, and/or division, which will fit in each of the columns above, using the same numbers.
4. Player scores one point for >, one point for <, and 3 points for exactly 100.

***Example:**
Player rolls a 5, 5, 6, 4

Exactly 100: 5 + 5 x 6 + 4
Less than 100: 5 x 6 + 5 – 4
More than 100: 5 x 6 x 5 - 4

> 100	Exactly 100	< 100

Fractured Fractions

Directions:

1. This game can be played with 3-5 players. 1 player needs to be the judge and should have the answer cards.
2. Player draws a problem card.
3. Player completes the problem, covers the answer. If the player cannot cover the answer, the game moves to the next player. He/she may answer the problem missed and cover the number, and one of his/her own.
4. Process in steps 2 and 3 continue until the cards are all gone.

1/6	1/18	5/24	$\frac{1}{2}$	3/14	1/5	4/27	7/18
5/18							45/128
2/9			Discard Here				4/9
1/12							1/15
3/28			Cards Here Face Down				3/16
1/54							1/72
3/8							1/3
5/9	2/7	7/12	1/7	2/21	8/15	$\frac{1}{4}$	1/9

5/6 x 2/3 =	$\frac{3}{4}$ x 7/9 =	6/49 x 7/9 =	3/7 x 7/12 =	12/21 x 7/36
5/12 x 9/20 =	2/15 x 5/8 =	4/9 x 3/24 =	5/8 x 4/5 =	3/10 x 2/3 =
5/6 x 7/15 =	15/16 x 3/8 =	5/11 x 44/45=	8/25 x 5/24 =	1/8 x 1/9 =
4/9 x 3/4 =	3/5 x 8/9 =	5/21 x 3/5=	3/7 x 2/3 =	3/5 x 5/8 =
1/3 x $\frac{1}{2}$ =	5/6 x $\frac{1}{4}$ =	3/7 x $\frac{1}{2}$ =	4/9 x 1/3 =	5/12 x 2/3 =

2/3 x 1/3 =	**3/7 x $\frac{1}{4}$ =**	**1/6 x 1/9 =**		

Answer Key

5/6 x 2/3 = 5/9	$\frac{3}{4}$ x 7/9 = 7/12	6/49 x 7/9 = 2/21	3/7 x 7/12 = $\frac{1}{4}$	12/21 x 7/36 = 1/9
5/12 x 9/20 = 3/16	2/15 x 5/8 = 1/12	4/9 x 3/24 = 1/18	5/8 x 4/5 = $\frac{1}{2}$	3/10 x 2/3 = 1/5
5/6 x 7/15 = 7/18	15/16 x 3/8 = 45/128	5/11 x 44/45= 4/9	8/25 x 5/24 = 1/15	1/8 x 1/9 = 1/12
4/9 x 3/4 = 1/3	3/5 x 8/9 =8/15	5/21 x 3/5= 1/7	3/7 x 2/3 = 2/7	3/5 x 5/8 = 3/8
1/3 x $\frac{1}{2}$ = 1/6	5/6 x $\frac{1}{4}$ = 5/24	3/7 x $\frac{1}{2}$ = 3/14	4/9 x 1/3 = 4/27	5/12 x 2/3 = 5/18

2/3 x 1/3 = 2/9	3/7 x $\frac{1}{4}$ = 3/28	1/6 x 1/9 = 1/54		

Order of Operations

Directions:

1. Please begin by cutting the cards apart.
2. Draw a card.
3. Look for the match to the card drawn on the playing board.
4. Cover the match with the color.

38	22	18	52	6	34	36	26
48							59
16				Discard Pile			2
12			Order of Operations 1st: Parentheses 2nd: Exponents 3rd: Multiply and divide (from left to right) 4th: Add and subtract from left to right				16
35				Question Cards Face Down			41
12							24
32							29
16	16	31	47	37	0	20	4

$2 \cdot 3 + 2 \cdot 5$	$(-3)(-2) + 5^2$	$5 + 2 \cdot (3 + 1)^2$	$2 \cdot (3 + 5)$	$4 - 2 + 5 \cdot 3^2$
$2 - 8 \div (3-1)^2$	$2 + 6 \cdot 3$	$12 - 4 \cdot 2$	$3 \cdot 2 + 4 \cdot 5$	$60 - 30 \div 6 + 4$
$20 - 2(4 + 5)$	$45 - 15 \cdot 2 + 1$	$60 - 3(5+4) + 8$	$160 - 5(2+6)\ 4$	$38 - 2(3+4) + 5$
$40 - (4 + 6) \div 2 + 3$	$20 + 6(8 + 12)$	$60 \div 3 \cdot 2 - 4(18-12)$	$8 + 4 \cdot 6 - 2(3+1)$	$30 - 3(4+1) + 2(9+1)$
$10 - 3 + 5$	$16 \div 2 \cdot 4$	$24 - 12 \div 2 + 4$	$6 + 18 \div 3 \cdot 2$	$60 - 36 \div 6 - 3 + 1$

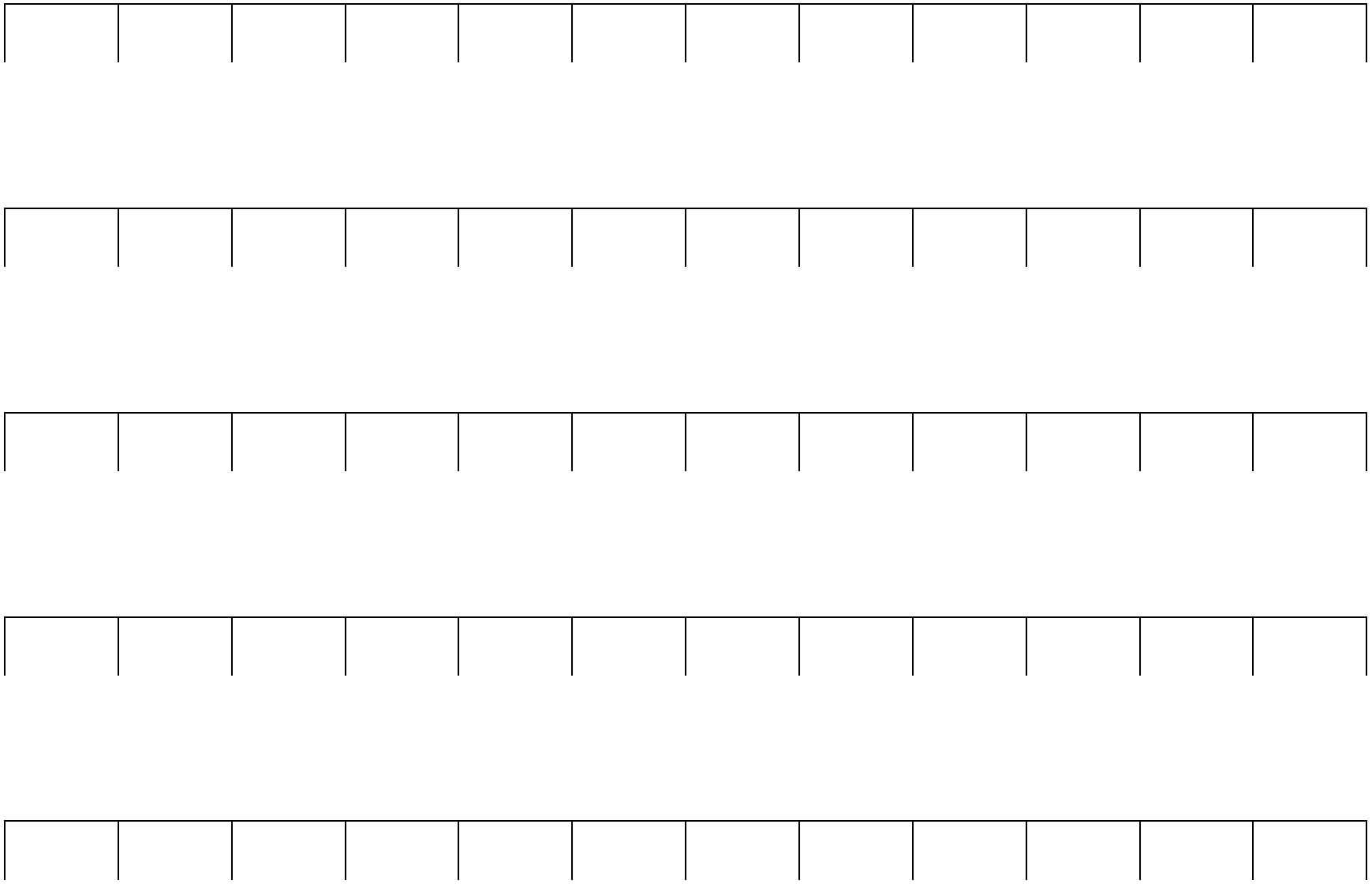
$18 - 6 \cdot 2$	**$10 + 3(2 + 6)$**	**$50 - 10(4 + 2) + 6$**	**$3(10-2)-2(3+3)$**	**$7(2\cdot5)-(5\cdot8)+6$**

Ordering Numbers

Directions:

1. Please cut the number cards apart.
2. Draw a card.
3. Order the numbers on the card.
4. Write the numbers on one of the number lines.
5. After all number lines are completed, record the range (the lowest number to the highest number). The player with the greatest range, wins the game.

0, 7, -1.5, 1.5, 3, -4	.013, .018, .025, .014	5,290, 5,410, 5,320, 5,300, 5,400, 5,380
-.4, .5, .25, 0, -.15, .6, -.2	56, 66, 6, 41, 36, 31, 21, 51	-200, 150, 400, -150, 0, 200, 350
-.32, .58, -.52, .28, 8, -.12, -2	-68, 82, -143, -93, 7, 57, -18	147, -133, -13, 67, 107, -93, -13
.26, -.64, -.54, .16, 6, -.34, -.14	-.102, -.094, -.1, -.101, -.095, -.099	-303, -123, -423, -153, -213, -333
.8, -.6, 0, .2, -.8, -.2, .4, -.4	-96, 135, 3, 36, -129, 0, -63	198, -141, 0, 47, -94, 141, -47
193, 89, -99, -5, 42, 136, -146	-.15, -.81, .51, 1.17, .18, -.48, .84	-9, 0, -18, 18, 36, -36, 9, -27



Measure Up

Directions:

1. This game requires three players: 2 contestants and 1 judge.
2. Each contestant has a vis-à-vis pen and a play board.
3. Cards are face down in the center.
4. Player draws a card and answers the question.
5. If the answer is correct, then player moves one space.
6. If the answer is incorrect, the other player has an opportunity to answer that question correctly and then answer one of their own. They move up the ladder, 1 space for each correct answer.

Measure Up! Player 1
Winner
Start ↑

Measure Up! Player 2
Winner
Start ↑

1. How many eggs in 3 dozen?	2. How many quarts are in 2 gallons?	3. How many feet in a mile?
4. How many ounces of cookies in a 1 ½ pounds?	5. If you leave Washington DC at 1:00 p.m. on a 4-hour flight, what time do you get to LA?	6. How many quarters in $13.50?
7. How many feet in 60 inches?	8. Which is further from the Pacific Ocean: Chicago or Boston?	9. How many pints are in a gallon?
10. In the statement 7:00 a.m., what does a.m. mean?	11. Would you measure water in meters or liters?	12. Is a football field measured in feet or yards?
13. How many hours in 1800 minutes?	14. How many cups are in a pint?	15. How many cups are in a gallon?
16. If you leave LA at 6:00 a.m. on a 5-hour flight, what time do you get into Washington DC?	17. How many yards in a mile?	18. How many time zones are there in the world.?

19. Denver is the "Mile High City", what is its elevation?	20. How many inches in $\frac{1}{4}$ of a yard of fabric?	21. The dollar in London is worth 2.5 £. How much is $7.00 worth?
22. If you put two of the same right-angle triangles together, what shape do you get?	23. Would you rather have a $2,000,000 or $.01 doubled every day for a month?	24. If a story is 12 feet, how tall is a 42-story building?

Answer Key
36 eggs
8 quarts
5, 280 feet
24 ounces
2:00 LA time
54 quarters
5 feet
Boston
8 pints
ante meridian or morning
liters
yards
30 hours
2 cups
16 cups
3:00 p.m. Washington time
1,760 yards
24 time zones
5,280 feet
9 inches
17.5 £ (pounds)
Square
$.01 doubled for 30 days. The total is $5,368,709.12.
504 feet

Alge-Blast

Directions:

1. Game can have up to 4 players.
2. Player will draw a card. He/she will look for the match to the card drawn on the playing board. Key: the Distributive Law must be applied to find the match.
3. Player covers the match with his/her color.
4. Card is discarded in the discard pile.
5. Second player repeats steps 1-3.

{-12 + 5}7	X • 4 + 3 • 4	a(b + c)	2(3 + 4)	3(a + b)	x(y + z)	5(-y + 4)	5(x + y)
{-2 + 7}4							2(3 + m)
(1 + 6)2			**Distributive Law**	**Discard Pile**			7(y + 1)
(7 + 2)3			**For any three numbers a, b, c, it is true that a(b+c) = ab + ac.**				9 • x + 9 • 2
4 • -x + 4 • 3				**Question Cards** **Face Down**			5 • 5 + 5 • 4
12{-2 + 3}							6(1 + 2)
3(-1 + 6)							4(3+7)
7(2+3)	8 • 1 + 8 • 2	100(2 + 7)	1 • 4 + 1 • 6	3(-2 + 5)	2 • 4 + 3 • 4	7•2 + 3•2	(-2+4) • 3

$7 \cdot 2 + 7 \cdot 3$	$8(1+2)$	$100 \cdot 2 + 100 \cdot 7$	$1(4+6)$	$3 \cdot [-2] + 3 \cdot 5$
$(2 + 3) \cdot 4$	$(7 + 3) \cdot 2$	$-2 \cdot 3 + 4 \cdot 3$	$4 \cdot 3 + 4 \cdot 7$	$6 \cdot 1 + 6 \cdot 2$
$5(5 + 4)$	$9(x + 2)$	$7 \cdot y + 7 \cdot 1$	$2 \cdot 3 + 2 \cdot m$	$5 \cdot x + 5 \cdot y$
$3 \cdot -1 + 3 \cdot 6$	$12 \cdot -2 + 12 \cdot 3$	$4\{-x + 3\}$	$7 \cdot 3 + 2 \cdot 3$	$1 \cdot 2 + 6 \cdot 2$
$-2 \cdot 4 + 7 \cdot 4$	$-12 \cdot 7 + 5 \cdot 7$	$(x + 3)4$	$a \cdot b + a \cdot c$	$2 \cdot 3 + 2 \cdot 4$

$3 \cdot a + 3 \cdot b$	$x \cdot y + x \cdot z$	$5 \cdot -y + 5 \cdot 4$		

Jeopardy

Directions:

1. This game needs 3-5 players. One player is the Master of Ceremonies.
2. Player asks for a Category (Geometry, Algebra, Fractions, Measurement) and a Dollar amount ($500, $400, $300, $200, $100). Master of Ceremonies gives the answer.
3. Player must then form the question. If player get the right question, then he/she gets the card. If player does not pose the right question, then one of the other players may answer.
4. Repeat the process until all the board is cleared.

Geometry	Fractions	Algebra	Measurement
$500	$500	$500	$500
$400	$400	$400	$400
$300	$300	$300	$300
$200	$200	$200	$200
$100	$100	$100	$100

Geometry: The longest side of a right triangle.	Fractions: Equivalent Fractions	Algebra: Operations	Measurement: 10,560 feet
Geometry: Radius of a Circle	Fractions: Lowest Common Multiple	Algebra: Like Terms	Measurement: 400 ounces
Geometry: A Ray	Fractions: Common Multiples	Algebra: Order of Operations	Measurement: 1,462 days
Geometry: Intersecting Lines	Fractions The Denominator	Algebra: Factors	Measurement: Area
Geometry: Point	Fractions The Numerator	Algebra: Quotient Rule	Measurement: Perimeter

Question Key

What is the hypotenuse? (G)	What are 2 or more fractions of = value? (F)	What are +, -+ x, and ÷? (A)	What is then number of feet in 2 miles? (M)
What is a straight line segment drawn from the center to one point on the circle. (G)	What is the smallest multiple of 2 or more numbers? (F)	What are terms of the same letter? (A)	What is 25 pounds in ounces? (M)
What is a part of a line that has one end point and goes on and on in one direction? (G)	What are multiples that are the same in 2 or more numbers? (F)	What are parentheses, exponents, x and ÷ (l-r), + and – (l-r)? (A)	What is the number of days in 4 years? (M)
What are lines that meet at only one point? (G)	What is the bottom number telling how many total parts? (F)	What are numbers connected by multiplication? (A)	What is the number of square units insie a space? (M)
What is an exact location in space? (G)	What is the top number that indicates the number of parts you have? (F)	What is to recopy the base then subtract the exponents? (A)	What is the distance around a figure? (M)