

Answer Sheet

Number Patterns

Vicki the vampire just got her invitation to the annual ghoul gala! She is very excited about this year's event, but the invitation is encoded in a "letter-number" cipher. This is when letters are replaced by numbers. Solve the number pattern problems below to decode the cipher and help Vicki figure out the location of this year's party!

The numbers follow a pattern and you will need to add, subtract, divide, or multiply to find the missing numbers.

Example:

2 6 10 14 18 (+4) The letter is N

A 1	B 2	C 3	D 4	E 5	F 6	G 7	H 8	I 9	J 10	K 11	L 12	M 13
N 14	O 15	P 16	Q 17	R 18	S 19	T 20	U 21	V 22	W 23	X 24	Y 25	Z 26



1. 1 7 13 19 25

2. 2 6 18 54 154

3. 27 9 3 1 $\frac{1}{3}$

4. 4752 792 132 22 $\frac{11}{3}$

5. 5 25 125 625 3125

6. 1 2 4 8 16

7. $\frac{729}{2}$ 81 18 4 $\frac{8}{9}$



Join us for the annual Ghoul Gala!

10:00 pm at the:














G **R** **A** **V** **E** **Y** **A** **R** **D**

1 2 3 4 5a 5b 6 7a 7b

Answer Sheet

Nightmare Number Patterns

Figure out what whole number or fraction is multiplied or divided to get the next number in the pattern. Write the number pattern in the pumpkin next to each line and then use it to fill in the missing numbers.

	1.	324	108	36	12	4	$\frac{4}{3}$	$\frac{4}{9}$	$\frac{4}{27}$
	2.	$\frac{3}{25}$	$\frac{3}{5}$	3	15	75	375	1875	9375
	3.	$\frac{3}{4}$	$\frac{3}{2}$	3	6	12	24	48	96
	4.	1458	486	162	54	18	6	2	$\frac{2}{3}$
	5.	1	3	9	27	81	243	729	2187
	6.	6	24	96	384	1536	6144	24,576	98,304
	7.	224	112	56	28	14	7	$\frac{7}{2}$	$\frac{7}{4}$
	8.	$\frac{2673}{2}$	891	594	396	264	176	$\frac{176}{3}$	$\frac{176}{9}$
	9.	31,232	7808	1952	488	122	$\frac{61}{2}$	$\frac{61}{8}$	$\frac{61}{32}$
	10.	21,875	4375	875	175	35	7	$\frac{7}{5}$	$\frac{7}{25}$
	11.	$\frac{9}{2}$	9	18	36	72	144	288	576
	12.	$\frac{64}{25}$	$\frac{16}{5}$	4	5	$\frac{25}{4}$	$\frac{125}{16}$	$\frac{625}{64}$	$\frac{3125}{256}$
	13.	$\frac{2}{3}$	2	6	18	54	162	486	1458

Answer Sheet

Adding Integers

Add each equation below with positive and negative integers.

1. $16 + 6 =$

22

2. $1 + (-4) =$

(-3)

3. $(-5) + (-3) =$

(-8)

4. $(-14) + 5 =$

(-9)

5. $(-3) + 3 =$

0

6. $(-7) + 10 =$

3

7. $2 + 9 =$

11

8. $(-8) + 6 =$

(-2)

9. $(-2) + (-4) =$

(-6)

10. $(-5) + 10 =$

5

11. $(-12) + 3 =$

(-9)

12. $(-8) + 13 =$

5

13. $9 + (-14) =$

(-5)

14. $(-16) + (-11) =$

(-27)

Answer Sheet

Adding Integers

Add each equation below with positive and negative integers.



1. $3 + (-4) + (-7) + 6 =$
 (-2)

2. $12 + 5 + 3 + (-4) =$
 16

3. $10 + 4 + (-2) + 9 =$
 21

4. $5 + 5 + 6 + (-5) =$
 11

5. $(-1) + (-4) + (-3) + (-1) =$
 (-9)

6. $(-12) + 6 + (-4) + (-10) =$
 (-20)

7. $20 + 2 + 2 + (-7) =$
 17

8. $(-7) + (-12) + (-4) + (-3) =$
 (-26)

9. $6 + 4 + (-4) + 8 =$
 14



Answer Sheet



Adding Integers

Find the missing addend to each equation.

1. $\underline{\quad\quad\quad} + (-2) = 8$
 $\underline{\quad\quad\quad}$ 10

2. $(-9) + \underline{\quad\quad\quad} = (-15)$
 $\underline{\quad\quad\quad}$ (-6)

3. $(-6) + \underline{\quad\quad\quad} = (-11)$
 $\underline{\quad\quad\quad}$ (-5)

4. $\underline{\quad\quad\quad} + (-2) = (-5)$
 $\underline{\quad\quad\quad}$ (-3)

5. $\underline{\quad\quad\quad} + (-4) = 10$
 $\underline{\quad\quad\quad}$ 14

6. $\underline{\quad\quad\quad} + (-6) = (-12)$
 $\underline{\quad\quad\quad}$ (-6)

7. $15 + \underline{\quad\quad\quad} = 5$
 $\underline{\quad\quad\quad}$ (-10)

8. $\underline{\quad\quad\quad} + 9 = 7$
 $\underline{\quad\quad\quad}$ (-2)

9. $(-4) + \underline{\quad\quad\quad} = 11$
 $\underline{\quad\quad\quad}$ 15



Answer Sheet

Adding Integers



Find the missing addend to each equation.

1. $(-8) + \underline{\quad} + 3 = (-12)$
 $\underline{\quad} \quad (-7)$

2. $(-9) + 5 + \underline{\quad} = (-18)$
 $\underline{\quad} \quad (-14)$

3. $\underline{\quad} + 3 + (-4) = 7$
 $\underline{\quad} \quad 8$

4. $10 + (-5) + \underline{\quad} = 16$
 $\underline{\quad} \quad 11$

5. $(-3) + (-5) + \underline{\quad} = (-8)$
 $\underline{\quad} \quad 0$

6. $4 + (-5) + \underline{\quad} = (-3)$
 $\underline{\quad} \quad (-2)$

7. $2 + \underline{\quad} + (-5) = (-5)$
 $\underline{\quad} \quad (-2)$

8. $8 + \underline{\quad} + (-10) = (-5)$
 $\underline{\quad} \quad (-3)$

9. $(-3) + \underline{\quad} + (-5) = (-17)$
 $\underline{\quad} \quad (-9)$

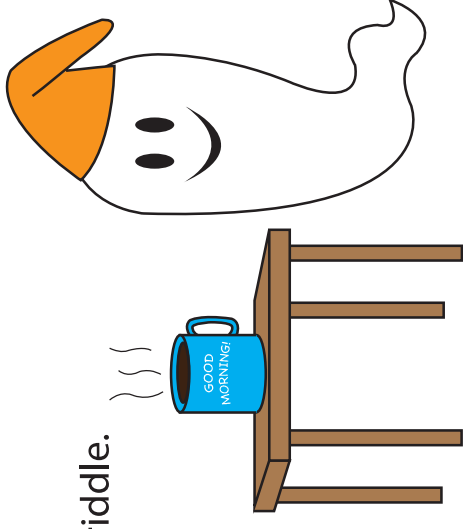


Answer Sheet

Division Riddle

Solve the division problems and then use the code to solve the riddle.

$2r3=n$	$3=i$	$25r1=-$
$17=b$	$9=r$	$11r9=m$
$23r3=e$	$7r10=y$	$2r41=u$
$13=0$	$31=f$	



What does Spooky like to have for breakfast?

A cup of coffee and a

$53 \overline{)901}$ $\underline{53}$ 371 $\underline{371}$ 0	$68 \overline{)884}$ $\underline{68}$ 204 $\underline{204}$ 0	$27 \overline{)351}$ $\underline{27}$ 81 $\underline{81}$ 0	$18 \overline{)451}$ $\underline{36}$ 91 $\underline{90}$ 1	$41 \overline{)697}$ $\underline{41}$ 287 $\underline{287}$ 0	$31 \overline{)716}$ $\underline{62}$ 96 $\underline{93}$ 3	$72 \overline{)648}$ $\underline{648}$ 0	$23 \overline{)207}$ $\underline{207}$ 0	$19 \overline{)143}$ $\underline{133}$ 10
b	o	o	-	b	e	r	r	y

$36 \overline{)405}$ $\underline{36}$ 45 $\underline{36}$ 9	$63 \overline{)167}$ $\underline{126}$ 41	$25 \overline{)775}$ $\underline{75}$ 25 $\underline{25}$ 0	$16 \overline{)496}$ $\underline{48}$ 16 $\underline{16}$ 0	$98 \overline{)294}$ $\underline{294}$ 0	$57 \overline{)117}$ $\underline{114}$ 3
m	u	f	f	i	n