

LEAP-Emphasis CARENCRO DARES for Grade Eight Days 1-25

DAY 1

1.	$\begin{array}{r} 231 \\ + 457 \\ \hline \end{array}$	2.	$\begin{array}{r} 9763 \\ - 4301 \\ \hline \end{array}$	3.	$\begin{array}{r} 237 \\ \times 12 \\ \hline \end{array}$	4.	$2 \overline{)1346}$
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- A. Find the average: 11, 7, 3, 8, 6
 B. a. $-2 + 3 =$ b. $2 + (-3) =$ c. $-2 + (-3) =$
 C. Change to repeating decimal notation, to nine places past decimal point: 0.3
 D. The Cottonmouth football team started on the 35 yard line, with four plays (chances) to get to the 45 yard line. On the first play, they lost two yards. On the second play, they gained seven yards. On the third play, they gained one yard. How much more would they need to gain on the fourth play to get to the 45 yard line?

5. Complete with exponents in the boxes: $(6 \times 10^{\square}) + (5 \times 10^{\square}) + 3(10^{\square}) = 6053$

DAY 2 BELOW

1.	Add: $974 + 566 =$	2.	Subtract: $4936 - 1943 =$	3.	$\begin{array}{r} 278 \\ \times 25 \\ \hline \end{array}$	4.	$8 \overline{)644}$
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- A. Find the average: 2, 1, 5, 8, 1, 4
 B. a. $-7 + 9 =$ b. $7 + (-9) =$ c. $-7 + (-9) =$
 C. Change to repeating decimal notation, to nine places past decimal point: 71.9
 D. The Cottonmouth football team started on the 35 yard line, with four plays (chances) to get to the 45 yard line. On the first play, they gained two yards. On the second play, they lost seven yards. On the third play, they gained six yards. How much more would they need to gain on the fourth play to get to the 45 yard line?

5. Round 56381 to the nearest hundred.

DAY 3 BELOW

1.	Find the sum: $6142 + 3756 =$	2.	Find difference: $9408 - 8496 =$	3.	$\begin{array}{r} 593 \\ \times 14 \\ \hline \end{array}$	4.	$3 \overline{)812}$
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- A. Find the average: 5, 1, 10, 2
 B. a. $10 + (-10) =$ b. $-10 + (-10) =$ c. $-10 + 10 =$
 C. Change to repeating decimal notation, to nine places past decimal point: 32.98
 D. The Cottonmouth football team started on the 35 yard line, with four plays (chances) to get to the 45 yard line. On the first play, they gained nine yards. On the second play, they lost four yards. On the third play, they lost one yard. How much more would they need to gain on the fourth play to get to the 45 yard line?

5. If a rectangle has length 7 and width 13, find the area.

DAY 4 BELOW

1.	$\begin{array}{r} 582 \\ 143 \\ + 214 \\ \hline \end{array}$	2.	$\begin{array}{r} 300 \\ - 299 \\ \hline \end{array}$	3.	$\begin{array}{r} 196 \\ \times 37 \\ \hline \end{array}$	4.	$9 \overline{)9815}$
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- A. Find the average: 15, 12, 3, 10, 5
 B. For a rectangle with length = 1.8 m and width = $\frac{3}{4}$ m, find the area and perimeter.
 C. Change to repeating decimal notation, to nine places past decimal point: 61.458
 D. Pearl mows grass in her neighborhood, getting paid \$9 per lawn. If she mows a lawn in 50 minutes, how much is she paid each hour?

5. Which equal(s) 1 ? $\frac{1}{2} \div \frac{1}{2}$; $\frac{1}{3} \div \frac{1}{3}$; $\frac{3}{4} \times \frac{3}{4}$; $\frac{3}{5} - \frac{2}{5}$

----- DAY 5 BELOW -----							
1.	Find	779	2.	Subtract:	3.	Multiply:	4.
	the	698		5000 – 4768 =		144 and 24	
	total	+ 579					7)85264

A. Find the mode: 10, 11, 5, 10, 2, 5, 10

B. a. $-20 + 6 =$ b. $-20 + (-6) =$ c. $20 + (-6) =$

C. With prism volume = base area $\times$ height, find volume in cubic feet if the base area is 33 **square feet** and the height is 4 **yards**.

D. Pearl mows grass in her neighborhood, getting paid \$9 per lawn. If she mows a lawn in 40 minutes, how much is she paid each hour?

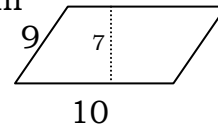
5. Round 672 to the nearest ten.

----- DAY 6 BELOW -----							
1.	$\begin{array}{r} 21,973 \\ + 92,027 \\ \hline \end{array}$	2.	$\begin{array}{r} 23,496 \\ - 13,397 \\ \hline \end{array}$	3.	$\begin{array}{r} 208 \\ \times 44 \\ \hline \end{array}$	4.	$54 \overline{)378}$

A. Find the median: 19, 10, 2, 13, 15

B. a. $100 + 8 =$ b. $-100 + 8 =$ c. $100 + (-8) =$

C. Find volume of a prism if the base is the parallelogram shown and the height is .55 .



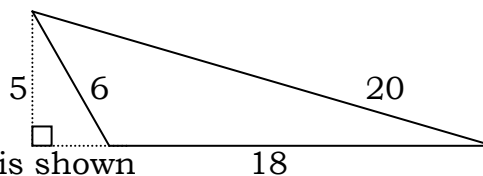
D. Pearl mows grass in her neighborhood, getting paid \$9 per lawn. If she mows a lawn in 30 minutes, how much is she paid each hour?

5. Draw a semicircle.

----- DAY 7 BELOW -----							
1.	Find the sum: $75 + 89 + 97 + 88 + 53 =$	2.	$\begin{array}{r} 23,496 \\ - 13,397 \\ \hline \end{array}$	3.	$351 \times 92 =$	4.	$43 \overline{)301}$

A. Find the average: 10, 13, 4, 12

B. a. $6 - 2 =$ b. $-6 - 2 =$ c. $-6 - (-2) =$



C. Find the volume of a prism whose base is shown and whose height is 2.5

D. Carla travels 100 miles in 2 hours and 180 miles in three hours. What is her average speed in miles per hour?

5. The perimeter of a regular pentagon is 45. What is the length of each side?

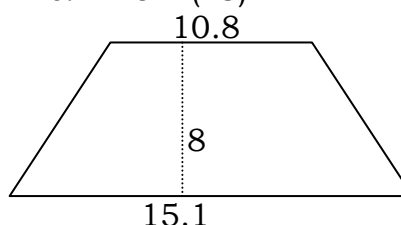
DAY 8 BELOW

1.	$\begin{array}{r} 608 \\ + 95 \\ \hline \end{array}$	2.	Find difference: $\$76,043 - 28,976 =$	3.	$700 \times 50 =$	4.	$48 \overline{)432}$
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A. Find the median: 9, 9, 2, 10, 8

B. a. $15 - 8 =$ b. $-15 - 8 =$

c. $-15 - (-8) =$



C. Find the volume of a prism whose base is shown and whose height is 10.5 .

D. Taft travels 90 miles in 2 hours and 190 miles in three hours. What is his average speed in miles per hour?

5. Copy the true statement(s) $.4 > 3$ $2.3 < .75$ $9 < 7$ $7.6 = 3 + 4.6$

DAY 9 BELOW

1.	Add: $\begin{array}{r} 946 \\ + 30,306 \\ \hline \end{array}$	2.	$486.004 - 72 =$	3.	Find product: $789 \times 94 =$	4.	$83 \overline{)332}$
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A. Find the mode: 5, 11, 13, 5, 13, 11, 13, 11, 11, 13, 13

B. a. $27 - 32 =$ b. $-27 - 32 =$ c. $-27 - (-32) =$

C. Change to repeating decimal notation, to nine places past decimal point: 9.541

D. Millsap travels 110 miles in 6 hours and 140 miles in four hours. What is his average speed in miles per hour?

5. Find the perimeter of a 13 by 17 rectangle.

DAY 10 BELOW

1.	Find the sum: $258 + 584 + 845 + 207 =$	2.	Subtract: $90,002 - 8,763 =$	3.	$\begin{array}{r} 144 \\ \times 23 \\ \hline \end{array}$	4.	$67 \overline{)536}$
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A. Find the median: 18, 12, 15, 10, 10, 1, 12

B. a. $121 - 0 =$ b. $-121 - 0 =$ c. $-121 - (-0) =$

C. Change to repeating decimal notation, to nine places past decimal point: 33.192

D. The 250 students will travel in buses that each hold 42 students. If the fewest number of buses are used, how many buses will be needed?

5. Round 62,936 to the nearest thousand.

DAY 11 BELOW

1.	$\begin{array}{r} .8 \\ + .5 \\ \hline \end{array}$	2.	$\begin{array}{r} .87 \\ - .39 \\ \hline \end{array}$	3.	$\begin{array}{r} 526 \\ \times 42 \\ \hline \end{array}$	4.	$32 \overline{)896}$
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A. What's the lowest score on the spelling test?

B. a. $117 - 123 =$ b. $-117 - 123 =$

c. $-117 - (-123) =$

C. Change to repeating decimal notation, to nine places past decimal point: 6.378

D. The 250 students will travel in buses that each hold 45 students. If the fewest number of buses are used, how many seats will be empty?

Scores on a Spelling Test

Stem	Leaves
6	8 9
7	2 3 5 7 8 8
8	4 4 6 7 7 8 9
9	1 4 5 7 7 7

5. Write 3,609, 482 with words.

DAY 12 BELOW

1.	Find the sum: $2.9 + .12 =$	2.	Subtract: $7.1 - 2.8 =$	3.	Multiply 36 and 967	4.	$48 \overline{)672}$
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- A. What was the range of scores? (see table of scores on Day 11.)
 B. a. $9 \times 7 =$ b. $-9 \times 7 =$ c. $-9 \times -7 =$
 C. Tell which is greater, 7.10 or 7.5
 D. The 250 students will travel in buses that each hold 51 students. If the fewest number of buses are used, how many buses will be needed?
 5. Draw a cylinder.

DAY 13 BELOW

1.	Add: \$ 2.58 \$34.74 \$.69 \$ <u>5.87</u>	2.	Find difference: $.56 - .19$	3.	$\begin{array}{r} 231 \\ \times 47 \\ \hline \end{array}$	4.	$29 \overline{)667}$
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- A. What was the mode of the scores? (see table of scores, Day 11)
 B. a. $12 \times 12 =$ b. $-12 \times 12 =$ c. $-12 \times -12 =$
 C. Tell which is greater, 8.125 or 8.13
 D. A catalog writer made a table for shipping weights of several sizes of cat beds. The table looked like this:

cat bed length = B	weight = W
12 in.	2 lbs.
15 in.	3 lbs.
18 in.	4 lbs.
21 in.	5 lbs.

Choose the equation that relates **B** and **W**.

- I. $4\mathbf{B} + \mathbf{W} = 50$ II. $3\mathbf{W} + 6 = \mathbf{B}$
 III. $\mathbf{B} \div 4 - 1 = \mathbf{C}$ IV. $\mathbf{B} \div 6 = \mathbf{W}$

5. What is the value of the digit 8 in 12,836,200 ?

DAY 14 BELOW

1.	Find the total: 2.86 .12 + <u>.7</u>	2.	$\begin{array}{r} 8.03 \\ - .97 \\ \hline \end{array}$	3.	$\begin{array}{r} 87 \\ \times 897 \\ \hline \end{array}$	4.	$12 \overline{)324}$
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- A. What was the median score? (see table of scores, Day 11)
 B. a. $11 \times 7 =$ b. $11 \times -7 =$ c. $-11 \times -7 =$
 C. Which would give a greater change in the volume of a prism -- adding 5 in² to the base area or adding 7 in. to the height? Justify your answer.
 D. A catalog writer made a table for shipping weights of several sizes of dog beds. The table looked like this:

dog bed length = B	weight = W
12 in.	5 lbs.
15 in.	6 lbs.
18 in.	7 lbs.
21 in.	8 lbs.

Choose the equation that relates **B** and **W**.

- I. $2\mathbf{B} + \mathbf{W} = 29$ II. $4\mathbf{W} - 8 = \mathbf{B}$
 III. $\mathbf{B} \div 3 + 1 = \mathbf{W}$ IV. $\mathbf{B} \div 6 = \mathbf{W}$

5. Find the area of a rectangle with length 19 and height 7.

DAY 15 BELOW

1.	Add: $8 + .05 =$	2.	Subtract: $47.6 - 6.5 =$	3.	$24 \times 312 =$	4.	$24 \overline{)984}$
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A. Jamie must do three different strokes in her training medley. She must do the breast, back, crawl, or butterfly. How many different ways can she combine her strokes?

B. a. $15 \times 3 =$ b. $15 \times -3 =$ c. $-15 \times -3 =$

C. Find the volume of the prism whose base is the triangle shown and whose height is 50.



D. A catalog writer made a table for shipping weights of several sizes of brass lamps. The table looked like this:

brass lamp height = B	weight = W
20 in.	5 lbs.
24 in.	8 lbs.
28 in.	11 lbs.
32 in.	14 lbs.

Choose the equation that relates **B** and **W**.

I. $\mathbf{B} + 2\mathbf{W} = 30$

II. $4\mathbf{W} = \mathbf{B}$

III. $3\mathbf{B} = 4\mathbf{W} + 40$

IV. $\mathbf{B} + 10 = 6\mathbf{W}$

5.	Copy the prime numbers: 7 10 1 9 13 8
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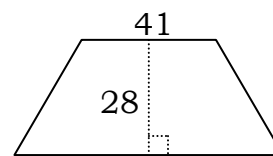
DAY 16 BELOW

1.	$\begin{array}{r} 2.103 \\ + 4.839 \\ \hline \end{array}$	2.	$9 - .674 =$	3.	$\begin{array}{r} 501 \\ \times 25 \\ \hline \end{array}$	4.	$48 \overline{)3120}$
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A. Mary must choose a password of six digits. She can only use the digits 1–8 without repeating. How many possible combinations will she choose from?

B. a. $13 \times 2 =$ b. $-2 \times 13 =$ c. $-2 \times -13 =$

C. Find the volume of the prism whose base is the trapezoid shown and whose height is 90.



D. Xena, Yaseen, and Zuner rake leaves for \$20 per person every Saturday. On one Saturday, Xena is ill and the other two split her work. How much should each get paid?

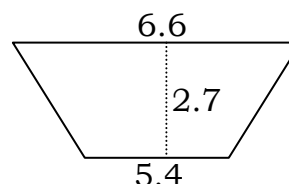
5.	What fraction of these numbers are prime? 13 19 16 22 25
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DAY 17 BELOW

1.	$\begin{array}{r} 1.5 \\ 2.1 \\ + 4.3 \\ \hline \end{array}$	2.	Find the difference: $4.82 - .9 =$	3.	$\begin{array}{r} 803 \\ \times 144 \\ \hline \end{array}$	4.	$24 \overline{)1824}$
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A. Tina designs swim suits. Her colors are silver, black, puce, and purple. How many different three-color combinations can she make?

B. Tell which is greater, 0.9862 or 0.9852



C. Find the volume of the prism whose base is the trapezoid shown and whose height is 15.

D. Xena, Yaseen, and Zuner rake leaves for \$20 per person every Saturday. One Saturday, Xena is ill and Zuner does her work. How much should each get paid?

5.	Give the next number in the series: 3, 6, 9, 12, 15, ____
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DAY 18 BELOW

1.	Find the sum of 6.4, .976, and 2.87	2.	$.5$ $-.289$	3.	406 $\times 406$	4.	$72 \overline{)2664}$
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- A. Frieda, Elly, Bill, Al, and Gil are in a relay race. But only three can run. They must decide the order of running. Count all possible orders in which three of the five can run.
- B. a. $27 \div 9 =$ b. $-27 \div 9 =$ c. $-27 \div -9 =$
- C. Tell which is greater, 3.900 or 3.9
- D. Xena, Yaseen, and Zuner rake leaves for \$20 per person every Saturday. One one Saturday, Xena does half her work and then has to go to the dentist. The other two split the rest of her work. How much should each get paid?

5. The perimeter of a regular octagon (eight equal sides) is 96. How long is each side?

DAY 19 BELOW

1.	$.752 + 4.53 + 6 =$	2.	Subtract: $7 - 3.01 =$	3.	8327 $\times 524$	4.	$95 \overline{)6935}$
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- A. Lisa has four posters to put in a row on her wall: Brittney Arrows, M'Sync, the Dixie Chucks, and the Frontstreet Boys. Count the number of ways Lisa can hang three posters
- B. a. $75 \div 15 =$ b. $75 \div -15 =$ c. $-75 \div -15 =$
- C. Tell which is greater, 47.3602 or 47.36018 .
- D. In the metric system, the customary measures of weight are milligram, gram, kilogram, and hectogram. What would one use to weigh a large dog?

5. Simplify: $3 \times 10^5 + 8 \times 10^4 + 7 \times 10^3 + 5 \times 10^2 + 6 =$

DAY 20 BELOW

1.	$.08$ $+ 1.5$	2.	$8.3 - .607 =$	3.	886 $\times 697$	4.	$41 \overline{)1845}$
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- A. Three different shirts can be worn with five different hats. How many combinations can be worn?
- B. a. $96 \div 3 =$ b. $-96 \div 3 =$ c. $-96 \div -3 =$
- C. Define probability. (answer: number of ways a particular event occurs divided by number of possible outcomes.)
- D. In the metric system, the customary measures of weight are milligram, gram, kilogram, and hectogram. What would one use to weigh a small pill?

5. If you get paid \$250 per week, how much do you get paid per month?

DAY 21 BELOW

1.	$\frac{1}{5}$ $+\frac{1}{5}$	2.	$\frac{6}{7}$ $-\frac{4}{7}$	3.	$\frac{2}{3} \times \frac{1}{3} =$	4.	$37 \overline{)4551}$
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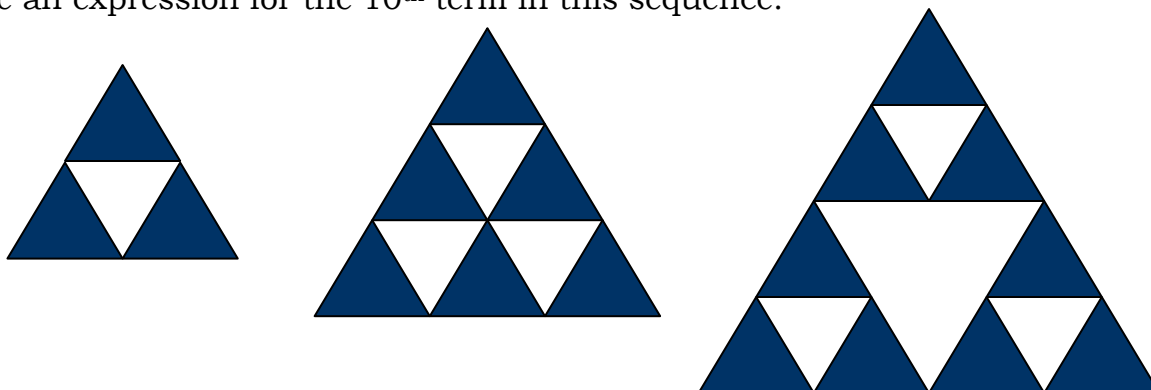
- A. For 118,250,604,421,795
- a. What is the value of the underlined digit?
- b. Which numeral is in the ten billions place?
- c. Write the numeral in word form
- d. round the numeral to the trillions place.
- B. a. $65 \div 5 =$ b. $65 \div -5 =$ c. $-65 \div -5 =$
- C. Define event. (answer: a specific outcome)
- D. Customary metric measures of distance are millimeter, centimeter, meter, and kilometer. What would one use measure
- (A) a driveway? (B) a border between countries? (C) a spoon?

5. Find perimeter and area of a rectangle with length 6 and height 10.

DAY 22 BELOW

1.	$\frac{1}{3} + \frac{1}{3} =$	2.	$\frac{7}{8} - \frac{4}{8} =$	3.	$\frac{7}{8} \times \frac{1}{2} =$	4.	$26 \overline{)8918}$
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- A. Convert as required: 19 hr 83 min 68 sec = 18 hr ____ min 8 sec
 B. a. $84 \div 4 =$ b. $-84 \div -4 =$ c. $-84 \div 4 =$
 C. Give an example of an event for which probability is 0.
 D. Write an expression for the 10th term in this sequence:

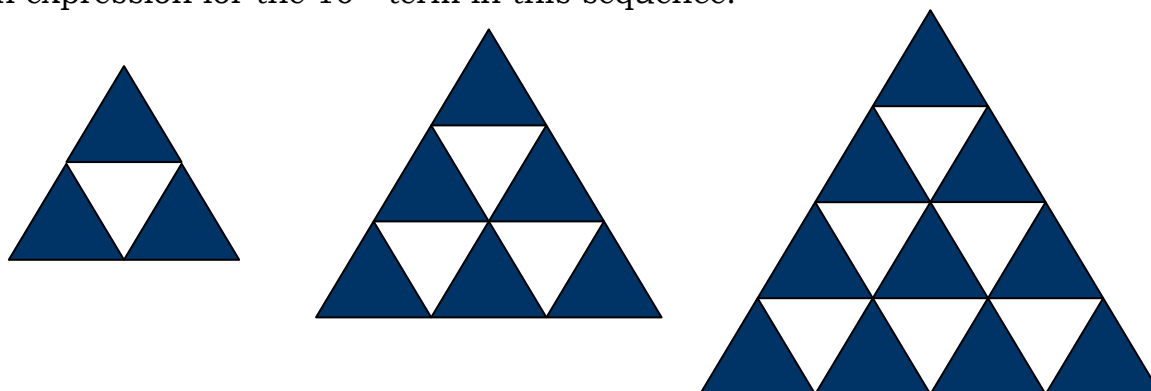


5. What is the greatest common factor of 18 and 30 ?

DAY 23 BELOW

1.	$\begin{array}{r} \frac{2}{5} \\ \text{Add:} \\ \frac{2}{5} \\ + \\ \frac{2}{5} \\ \hline \end{array}$	2.	Find difference: $\frac{13}{16} - \frac{5}{16} =$	3.	$\frac{1}{2} \times \frac{1}{4}$	4.	$34 \overline{)7344}$
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- A. $\begin{array}{r} 15 \text{ min } 54 \text{ sec} \\ - 9 \text{ min } 50 \text{ sec} \\ \hline \end{array}$
 B. Simplify: : a. $-3 + 5 \times -6 =$ b. $3 + -5 \times 6 =$
 C. The Sports Store carries one brand of basketball tank-top in three sizes, M, L, XL. Each size comes in two colors, gold (G), and black (B). Make a tree diagram that shows all the possible combinations of size and color.
 D. Write an expression for the 10th term in this sequence:



5. Copy the numbers that are not prime: 7 20 0 18 21 16 49 51 27

----- DAY 24 BELOW -----

1.	Find the sum: $\frac{3}{7} + \frac{2}{7} =$	2.	Subtract: $\frac{8}{19} - \frac{8}{19} =$	3.	$\frac{7}{8} \times \frac{1}{3} =$	4.	$17 \overline{)3366}$
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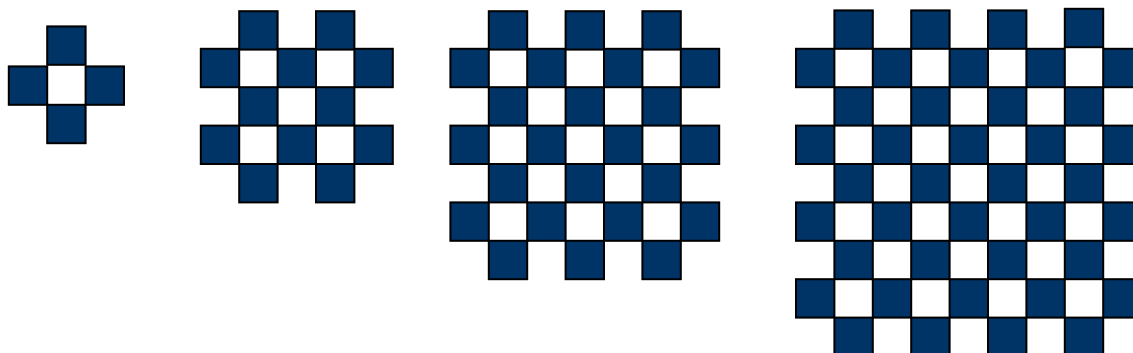
A. 7 hr 55 min

+3 hr 18 min

B. Simplify: : a. $5 + 7(-8) =$ b. $-5 + (-7)8 =$

C. Make a tree diagram to show all possible outcomes when at a restaurant choosing between soup or salad, fish or chicken, and ice cream or cake.

D. Write an expression for the 10th term in this sequence:



5. Copy the true statements: $.7 > 6$ $73 = .73$ $.078 < 1.6$ $2.3 < 4.6$

----- DAY 25 BELOW -----

1.	$\frac{6}{25} + \frac{8}{25} =$	2.	$\frac{5}{7} - \frac{0}{7} =$	3.	$\begin{array}{r} 503 \\ \times 200 \\ \hline \end{array}$	4.	$52 \overline{)9672}$
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A. Draw and label a 130° angle. Classify this angle, and give the measure of the angle's supplement.

B. Simplify: a. $-10 - |3 - 9| =$ b. $10 + |3 - 9| =$

C. Define combination: an arrangement or listing of objects in which order is not important.

D. The average of six girls' heights is 50 inches. If a seventh girl's height is 64 inches, what is the new average?

5. Copy the numbers that are not prime. 7 20 0 18 21 16 49 51 27