

Placement Test for *Math in Focus 4A*

1. Which pair of numbers are composite numbers? Circle your answer.

4 and 9 23 and 31 13 and 25 53 and 81

2. Estimate the value of $645 + 369$ by rounding each number to the nearest hundred. Then find the exact sum.

a. $645 + 369$ is about _____.

b. $645 + 369$ is exactly _____.

3. Divide 8,715 by 6. Circle your answer.

145 R5 1452 1452 R3 1542 R5

4. Consider the number 543,876,021.

a. Write out the number in words.

b. What digit is in the ten thousands place? _____

c. What is the value of the digit 6 in this number? _____

d. $543,876,021 = 876,000 + 21 +$ _____

e. What number is 100,000 more than 543,876,021? _____

f. What number is 100 less than 543,876,021? _____

g. Round 543,876,021 to the nearest million. _____

h. Find the difference between 543,876,041 and 543,876,021. _____

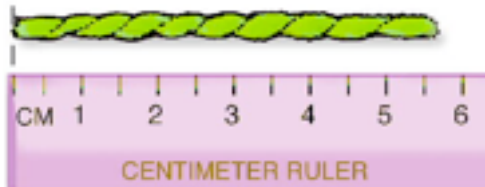
i. Now find the number that is 11 less than this difference. _____

5. After giving out 13 stickers to each of her 35 students, Mrs. Barnett had 22 stickers left. How many stickers did she have at first?



She had _____ stickers at first.

6. Study the picture. Then circle your answers.



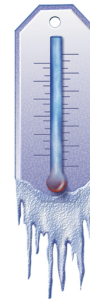
- a. How long is the green yarn?

$4\frac{1}{2}$ cm 5 cm $5\frac{3}{4}$ cm 6 cm

- b. If the yarn were twice as long, how long would it be?

$11\frac{1}{2}$ cm 12 cm $12\frac{1}{4}$ cm $10\frac{1}{2}$ cm

7. The temperature in Alaska today is 40 degrees Celsius below freezing. Write this as a negative number.



8. Ming has \$150. She wants to buy 2 CDs that cost \$18.95 each and a camera that costs \$79.50. Does she have enough to also buy a pair of jeans that costs \$20? Estimate and circle your answer.



yes no

9. Complete this number pattern.

60, 55, 50, _____, _____, _____

10. Arrange these numbers in increasing order.

14, -4, 7, 0, -14

_____, _____, _____, _____, _____

11. What number between 20 and 30 is divisible by 12?

12. What is the least possible number that becomes 2,700 when rounded to the nearest 100?

13. Which is the closest estimate of 58×21 ? Circle your answer.

50 X 20

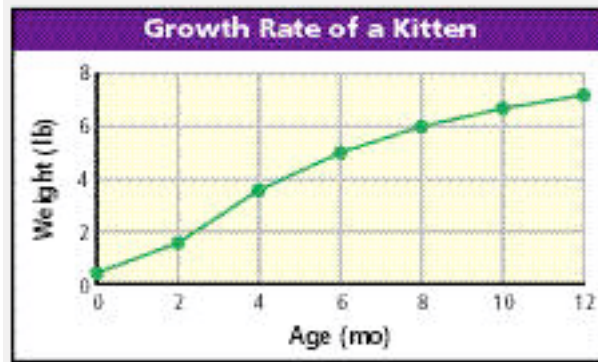
50 X 30

60 X 20

60 X 30

14. What positive common multiple of 4 and 6 is smaller than the product of 4 and 6?

18. Use the line graph to answer the questions.



a. How much did the kitten weigh when it was 6 months old?

b. How old was it when it weighed 6 pounds?

c. About how much more did it weigh at 12 months than at 2 months?

19. What is the median of this set of data?

9, 9, 10, 10, 10, 11, 12, 12, 12

Circle your answer.

9 10 11 12

20. What is the mode of this set of data?

24, 36, 21, 24, 35, 20, 48, 24, 36, 21

Circle your answer.

21 24 36 48

21. This chart shows the ages of 5 girls.

Girls	Ages
Melissa	12
Becky	11
Than	13
Amina	14
Nicole	10

What is the average age of the girls? _____

22. Tanisha has a lot of marbles. 640 of them are orange. There are four times as many orange marbles as green marbles. How many green marbles does she have?



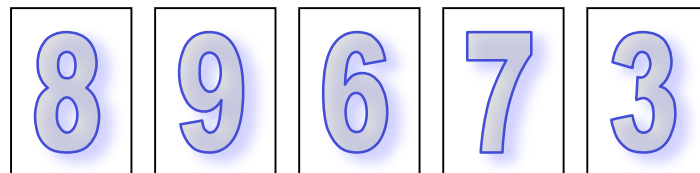
She has _____ green marbles.

23. During the past year, Carlos earned \$1,979 each month. He saved \$6,342 and spent the rest. How much did he spend?



He spent \$_____.

24. What is the probability of drawing a number greater than 6 from this set of cards?



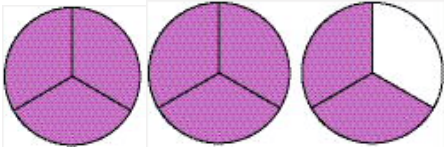
Circle your answer.

$\frac{3}{4}$ $\frac{4}{5}$ $\frac{3}{5}$ $\frac{1}{2}$

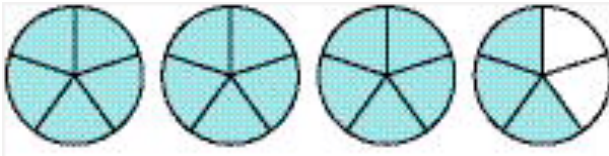
25. How many eighths are in two and seven-eighths? _____

26. Write the mixed number that is represented by the colored sections of each circle.

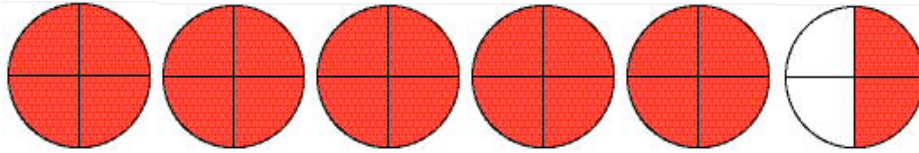
a.



b.



c.



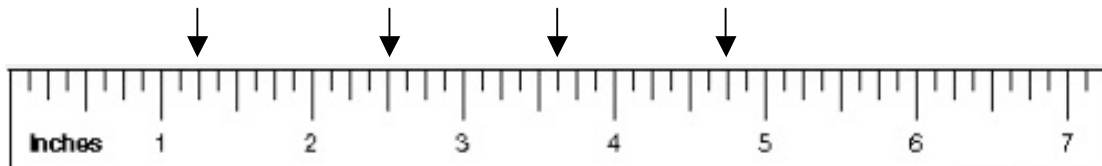
27. What mixed numbers are shown on the ruler?

a.

b.

c.

d.



a. _____

b. _____

c. _____

d. _____

28. Subtract these fractions.

$$\frac{5}{8} - \frac{1}{2} = \underline{\hspace{2cm}}$$

$$\frac{2}{3} - \frac{4}{9} = \underline{\hspace{2cm}}$$

Math in Focus 4A Placement Test Answer Key

Point values are indicated in parentheses next to each item number; 100 points total. If student's score is 80 or more, consider starting with level 4B.

1. (2 points)
4 and 9
2. (4 points)
a. 1,000
b. 1,014
3. (2 points)
1,452 R3
4. (10 points; a = 2 points)
a. Five hundred forty-three million eight hundred seventy-six thousand twenty-one
b. 7
c. 6,000
d. 543,000,000
e. 543,976,021
f. 543,875,921
g. 544,000,000
h. 20
i. 9
5. (2 points)
She had 477 stickers at first.
6. (4 points)
 $\frac{3}{4}$
a. 5 $\frac{3}{4}$ cm
 $\frac{1}{2}$
b. 11 $\frac{1}{2}$ cm
7. (2 points)
 -40°C
8. (2 points)
yes
9. (2 points)
45, 40, 35
10. (2 points)
-14, -4, 0, 7, 14
11. (2 points)
24
12. (2 points)
2,650
13. (2 points)
60 X 20
14. (2 points)
12
15. (4 points)
a. 1, 2, 3, 5, 6, 10, 15, 30
b. 2, 3, 5
16. (12 points)
a. 238
b. 1,511
c. 2,389
d. 500
e. 3,500,000
f. 7,000
17. (6 points)
a. Wednesday
b. Friday
c. 105
18. (6 points)
a. 5 lb
b. 8 mo
c. 6 lb
19. (2 points)
10
20. (2 points)
24
21. (2 points)
12
22. (2 points)
She has 160 green marbles.
23. (2 points)
He spent \$17,406.
24. (2 points)
 $\frac{3}{5}$
25. (2 points)
23
26. (6 points)
 $\frac{2}{3}$
a. 2 $\frac{2}{3}$
 $\frac{3}{5}$
b. 3 $\frac{3}{5}$
 $\frac{1}{2}$ $\frac{2}{4}$
c. 5 $\frac{1}{2}$ or 5 $\frac{2}{4}$

27. (8 points)

a. $1 \frac{1}{4}$

b. $2 \frac{1}{2}$

c. $3 \frac{5}{8}$

d. $4 \frac{3}{4}$

28. (4 points)

a. $8 \frac{1}{2}$

b. $9 \frac{2}{9}$