## FINAL REVIEW

## Choose the correct answer, and write its number in the parentheses.

1. What is the value of the digit 4 in 135.847 ?
(1) 4 tenths
(3) 4 hundredths
(2) 4 tens
(4) 4 hundreds
2. What is the value of $0.87 \times 100$ ?
(1) 0.0087
(3) 87
(2) 8.7
(4) 870
3. 4 m 5 cm is the same as $\qquad$ cm .
(1) 405
(3) 4,005
(2) 450
(4) 4,500
4. There are 37 students in a martial arts class. There are 9 more male students than female students. What fraction of the students are male?
(1) $\frac{14}{37}$
(3) $\frac{28}{37}$
(2) $\frac{23}{37}$
(4) $\frac{29}{37}$
5. Write $2 \frac{3}{4}$ as a decimal.
(1) 2.15
(3) 2.43
(2) 2.34
(4) 2.75
6. 0.811 m rounded to the nearest centimeter is $\qquad$
(1) 0.8 cm
(3) 81 cm
(2) 80 cm
(4) 811 cm
7. In the figure below, $A D B$ and $B D E$ are right triangles. $A B C$ is a straight line. Find the angle marked h.
(1) $21^{\circ}$
(2) $24^{\circ}$
(3) $42^{\circ}$
(4) $48^{\circ}$

8. The ratio of the length of a rectangle to its width is $6: 1$. If the length is $36 x$ in., the perimeter of the rectangle is $\qquad$ in.
(1) $42 x$
(3) $84 x$
(2) $48 x$
(4) $252 x$
9. The average of four numbers is 7 . If 12 is added to the four numbers, what will the new average be?
(1) 7
(3) 9
(2) 8
(4) 10
10. Roger saved $15 \%$ more than Wayne. If Roger saved $\$ 2,300$, how much did Wayne save?
(1) $\$ 2,000$
(3) $\$ 4,300$
(2) $\$ 4,255$
(4) $\$ 4,945$
11. Natasha was given a sum of pocket money on Monday. She used $\$ 3.80$ to buy a book on Tuesday. On Wednesday, Natasha ran some errands for her mother and was given \$7. On Thursday, she spent $65 \$$ on a pencil. If she had $\$ 9.50$ left, how much pocket money was she given on Monday?
(1) $\$ 5.05$
(3) $\$ 12.05$
(2) $\$ 6.95$
(4) $\$ 20.95$
12. Cynthia had $\$ 8$ on her bus pass. Each trip would use up $\frac{4}{5}$ of a dollar. How many trips could she travel using her bus pass?
(1) 6 trips
(3) 10 trips
(2) 8 trips
(4) 12 trips
13. The rates for a hotel room are shown below.

| Weekdays | $\$ 48$ per day |
| :--- | :--- |
| Saturdays and Sundays | $\$ 70$ per day |

Mr. Mizer stayed in the hotel for a week. How much did he pay?
(1) $\$ 336$
(3) $\$ 446$
(2) $\$ 380$
(4) $\$ 490$
14. At a shop, a book costs $\$ 1.90$ more than a pen. A pen costs $\$ 3$ less than a pencil case. If the total cost of the three items is $\$ 13.30$, how much does the book cost?
(1) $\$ 2.80$
(3) $\$ 4.90$
(2) $\$ 4.70$
(4) $\$ 5.80$
15. Lurene spent $25 \%$ of her money on a pair of shoes and the rest on some dresses. If Lurene spent $\$ 150$ on the dresses, how much was the pair of shoes?
(1) $\$ 37.50$
(3) $\$ 112.50$
(2) $\$ 50$
(4) $\$ 450$

## Write your answers on the lines.

16. ABC and DEF are identical triangles. What is the sum of $\angle \mathrm{x}, \angle \mathrm{y}$ and $\angle \mathrm{z}$ ?

17. Find the value of $2 \frac{1}{8}-1 \frac{3}{4}$.
18. In the figure below, $A D B$ and $B D E$ are right triangles. $A B C$ is a straight line. Find the angle marked h.
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(2) $24^{\circ}$
(3) $42^{\circ}$
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19. The ratio of the length of a rectangle to its width is $6: 1$. If the length is $36 x$ in., the perimeter of the rectangle is $\qquad$ in.
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(4) $\$ 450$

## Write your answers on the lines.

16. $A B C$ and $D E F$ are identical triangles. What is the sum of $\angle x, \angle y$ and $\angle z$ ?

17. Find the value of $2 \frac{1}{8}-1 \frac{3}{4}$.
18. Shade the unit shape in the tessellation below.

19. Paul bought a digital camera for $\$ 300$. He sold his camera to a colleague at a discount of $15 \%$. How much did he sell the digital camera for?
20. Natalie bought 4 similar skirts and 6 similar dresses for $\$ 426$. If one skirt and one dress cost \$96, find the cost of each dress.
21. Draw a line of symmetry for the figure below.


The graph below shows the distance traveled by a van and the amount of gasoline it had left. Study the graph below and answer questions 22 to 24 .

22. How much gasoline was consumed after the van had traveled 20 miles?
23. How far did the van travel with 5 gal. of gasoline?
24. On the average, how far did the van travel with 1 gal. of gasoline?
25. Measure $\angle \mathrm{z}$.

26. Find the value of $\frac{6 y+4 y+5}{11}$ when $y=5$.
27. Spencer called Jacob at quarter past two in the afternoon and promised to meet Jacob in half an hour. However, Spencer was 15 minutes late. At what time did Spencer arrive?
28. 2 hundredths 8 tenths 28 ones written as a decimal is $\square$
29. If $A$ is 4 times $B$ and $B$ is 6 times $C$, find the ratio $A: B: C$.
30. The figure below shows two triangles in a rectangle. Find the area of the unshaded part.


## Write your answers on the lines. You may use a calculator.

31. $\frac{1}{8}+\frac{3}{8}=\square \times \frac{1}{4}$
32. Find the value of $\angle \mathrm{a}$.

33. What is $20 \%$ of 3 m 25 cm ?
34. Adam bought 3 books at $\$ 9.25$ each. How much change would he receive if he gave the cashier a fifty-dollar bill?
35. A can of sardines has a mass of 325 g . 60 cans of sardines are packed for delivery in a box. If the empty box has a mass of 1.44 kg , what is the total mass of a box of 60 tins of sardines? Write your answer to the nearest kilogram.

Solve the following story problems. Show your work in the space below. You may use a calculator.
36. There are 45 waitresses and 50 waiters in a chain of restaurants. $60 \%$ of them are new staff, $50 \%$ of the remaining staff are temporary, and the rest are permanent staff. How many permanent staff are there?
37. The table below shows the fare for hiring a taxi. How much would Rieko have to pay if she traveled 7.8 miles?

| First mile | $\$ 2.50$ |
| :--- | :---: |
| Every $\frac{1}{4}$ mi. thereafter or less for the next 5 mi. | $\$ 0.40$ |
| Every $\frac{1}{10}$ mi. thereafter or less after 6 mi. | $\$ 0.20$ |

38. A shopkeeper bought 8 boxes of apples. There were $15 y$ apples in each box. He sold $8 y$ apples and threw away 17 rotten apples.
(a) How many apples did he have left? Write your answer in terms of $y$.
(b) If $y=20$, how many apples did he have left?
39. Lenny had 86 marbles and Bob had 22 marbles. After each of them received the same number of marbles from Emilio, Lenny had twice as many marbles as Bob. How many marbles did Emilio give to both of them?
40. $\$ 90$ is shared between Claire, Eliza, and Vicky. Claire receives $\frac{5}{8}$ of the money and Eliza receives $\frac{2}{3}$ of the remainder. How much more does Claire receive than Vicky?
41. At a city-wide assembly, $28 \%$ of the participants were fourth graders. There were $7 \%$ more fifth graders than fourth graders. If the number of sixth graders was 910 fewer than the total number of fifth graders and fourth graders, how many sixth graders attended the assembly?
42. The average mass of Harry and William is 65.2 kg . The average mass of William and Charlie is 58.6 kg .
(a) Find the average mass of Harry and Charlie if William has a mass of 62.3 kg .
(b) Find the total mass of the three boys.
43. The ratio of the perimeter of a square field to that of a rectangular field is $3: 2$. If each side of the square field is 9 yd ., find
(a) the perimeter of the rectangular field.
(b) the width of the rectangular field if its length is 8 yd .
44. $\frac{3}{5}$ of Donna's coins were nickels, $25 \%$ of them were quarters, and the rest were dimes. If there were $\$ 20$ worth of quarters, find the total amount of money that Donna had.
45. Mr. Anderson pays $\$ 375$ for his cell phone every month. Mrs. Anderson pays $\frac{2}{5}$ as much as Mr. Anderson for her cell phone every month. They decided to cut down on their cell phone bills. Mr. Anderson's bill is reduced by $\frac{1}{5}$ in the following month and Mrs. Anderson bill is reduced by $\frac{1}{6}$.
(a) How much does Mrs. Anderson pay for her cell phone bill every month?
(b) How much do both of them pay for their cell phone bills in the following month?
46. There are 600 people at a beach. $\frac{2}{3}$ of them are men, while the rest are women and children. $\frac{1}{3}$ of the number of women equals $\frac{1}{2}$ of the number of children. If $\frac{1}{10}$ of the women and $\frac{1}{4}$ of the children cannot swim, how many women and children can swim?
47. A jar of cookies is 630 g when it is $\frac{1}{2}$ full and 855 g when it is $\frac{7}{9}$ full.
(a) How many kilograms of cookies can the jar hold when it is full?
(b) What is the mass of the empty jar?
48. Marie bought some albums and picture frames as gifts for a party. Each album cost $\$ 18$ and each picture frame cost $\$ 3$ less. The ratio of picture frames to albums was 4:3. She paid a total of $\$ 1,026$ for all the albums and picture frames.
(a) How many albums and picture frames did she buy in all?
(b) If Marie did not buy any picture frames, how many more albums could she buy with the same amount of money?
