Questions 1, 2, 3, and 4 refer to the following information.

In Mrs. Archuleta's math class there are a **total** of 30 students in class. 20 students are girls.

1. What is the ratio of **girls** to **boys**?

	$\Diamond$	$\Diamond$	$\Diamond$	
0	0	$\odot$	0	0
0	0	0	0	0
1)	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

- 2. What is the ratio of **girls to** the **total** number of students?
  - ① ② ③ ④ ⑤
  - (1) 3:2
  - (2) 2:3
  - (3) 1:3
  - (4) 1:2
  - (5) 3:1
- 3. What is the ratio of **boys to** the **total** number of students?
  - 0 2 3 4 5

  - (1) 1:4
  - (2) 4:1
  - (3) 1:3
  - (4) 3:1
  - (5) 5:1
- What is the ratio of the <u>total</u> number of students to <u>girls</u>?
  - ① ② ③ ④ ⑤
  - (1) 1:4
  - (2) 4:3
  - (3) 3:4
  - (4) 4:1
  - (5) 3:2

- 5. To make cranberry juice, combine a can of concentrate with 3 cans of water. Write the ratio of water to concentrate.
  - ① ② ③ ④ ⑤
  - (1) 1:3
  - (2) 3:1
  - (3) 4:1
  - (4) 5:1
  - (5) 1:6
- 6. Donna takes home \$2,000 a month. She saves \$200 and spends the rest. Write a ratio of the amount Donna **spends to** the amount Donna **saves** each month.
  - 0 2 3 4 5
  - (1) 1:9
  - (2) 9:1
  - (3) 10:1
  - (4) 1:10
  - (5) 3:5
- 7. The Bobcats lost 14 games and won 8 games this season. Write the ratio of **wins** *to* **losses**.
  - 0 2 3 4 5
  - (1) 4:11
  - (2) 4:7
  - (3) 7:4
  - (4) 11:4
  - (5) 1:4
- 8. Pam sleeps 8 hours every night. What is the ratio of Pam's time spent **sleeping to** Pam's time spent **not sleeping**?
  - ① ② ③ ④ ⑤
  - (1) 1 to 2
  - (2) 2 to 1
  - (3) 1 to 3
  - (4) 1 to 4
  - (5) 4 to 1

9. To make limeade, add 4 cans of water to a can of limeade concentrate. Write the ratio of **concentrate** to **water**.

	$\otimes$	$\Diamond$	0	
0	0	0	0	0
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

- Vail Ski Resort advertised that it had 23 snow days during January. Write a ratio of <u>snow</u> days <u>to no</u> <u>snow</u> days for January. There are a total of 31 days in January.
  - 1 2 3 4 5
  - (1)  $^{23}/_{31}$
  - (2)  $^{23}/_{8}$
  - (3)  $\frac{8}{23}$
  - $\binom{3}{4}$   $\binom{723}{123}$
  - (5)  $^{8}/_{31}$
- 11. What is the ratio of <u>15 inches</u> to <u>a yard</u>? 36 inches = 1 yard.
  - 1 2 3 4 5
  - (1) 12:5
  - (2) 5:12
  - (3) 5:1
  - (4) 1:5
  - (5) 7:12
- 12. Sylvia's living room is 15 feet long and 12 feet wide. What is the ratio of the **width** to the **length**?
  - ① ② ③ ④ ⑤
  - (1) 5:4
  - (2) 4:5
  - (3) 3:5
  - (4) 5:3
  - (5) 3:2

- 13. In town, Louie gets 16 miles on a gallon of gasoline. In the country, he gets 24 miles per gallon. What is the ratio of his **town** gas mileage to his **country** gas mileage?
  - ① ② ③ ④ ⑤
  - (1) 4:5
  - (2) 3:2
  - (3) 2:3
  - (4) 4:3
  - (5) 5:4
- 14. The softball team at Taylor Lumber has 20 members. Twelve of them are men. What is the ratio of the number of <u>men</u> to the number of <u>women</u> on the team?
  - ① ② ③ ④ ⑤
  - (1) 3:5
  - (2) 2:3
  - (3) 3:2
  - (4) 2:5
  - (5) 5:2
- 15. Simplify (reduce) the ratio 12:15.

	$\otimes$	$\Diamond$	$\Diamond$	
0	0	0	0	0
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	6
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

- 16. The Coffee Factory has a total of 150 employees. 105 employees belong to the union. What is the <u>ratio</u> of the number of employees who <u>do not belong to</u> <u>the union</u> to the <u>total</u> number of employees in the factory?
  - ① ② ③ ④ ⑤
  - (1)  $^{1}/_{10}$
  - (2)  $^{3}/_{10}$
  - (3)  $^{7}/_{10}$
  - (4) <sup>9</sup>/<sub>10</sub>
  - (5)  $^{1}/_{12}$

- 17. Sugar City has a total budget of \$18,000,000. \$3,000,000 is spent on education. What is the ratio of the amount spent on education to the amount not spent on education?
  - 1 2 3 4 5
  - (1) 1:5
  - (2) 1:3
  - (3) 3:5
  - (4) 3:8
  - (5) 5:8
- 18. The GED math test has a total of 50 questions.
  There are 15 fraction problems and 5 decimal problems. What is the ratio of the total number of fraction and decimal problems to the total number of problems on the test?
  - 1 2 3 4 5
  - (1)  $^{1}/_{4}$
  - (2)  $^{2}/_{5}$
  - (3)  $^{3}/_{8}$
  - (4)  $^{2}/_{9}$
  - (5)  $^{1}/_{15}$
- 19. In Yvette's Day Care Center there are a total of 80 children. There are 48 girls. What is the ratio of the number of **boys** to the number of **girls**?
  - 0 2 3 4 5
  - (1) 1:3
  - (2) 2:3
  - (3) 3:5
  - (4) 3:7
  - (5) 3:2
- 20. Simplify the ratio 27:9.
  - 1 2 3 4 5
  - (1)  $^{1}/_{3}$
  - (2)  $^{3}/_{7}$
  - (3)  ${}^{3}/_{1}$
  - (4)  $^{3}/_{5}$
  - (5)  $^{3}/_{4}$

Questions 21 and 22 refer to the following information.

Last season, the Tigers played a total of 80 games. They lost 20 games.

21. What is the ratio of the number of games the team **won** to the **total** number of games it played?

	$\otimes$	$\Diamond$	$\otimes$	
0	0	0	0	0
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

- 22. What is the ratio of the number of games the team **lost** to the **total** number of games it played?
  - ① ② ③ ④ ⑤
  - (1)  $^{1}/_{8}$
  - (2)  $^{1}/_{4}$
  - (3)  $\frac{3}{4}$
  - (4)  $^{3}/_{8}$
  - (5)  $^{3}/_{9}$
- 23. Find the ratio of **4 ounces** to **a pint**.

(1 pint = 16 ounces)

- ①②③④⑤
- (1) 1 to 4
- (2) 4 to 1
- (3) 1 to 16
- (4) 16 to 1 (5) 17 to 1
- 24. Clyde bought a stereo on sale for \$450. He saved \$150 by buying the stereo on sale. What was the ratio of the **sale price** to the **original price**?
  - 0 2 3 4 5
  - (1) 4:3
  - (2) 3:4
  - (3) 1:9
  - (4) 1:10
  - (5) 9:1

(2)

(3)

(4)

(5)

(1)

(2)

(3) (4)

(5)

29.

5:8

7:5

6:5

5:6

① ② ③ ④ ⑤

2:3 3:2

5:2

2:5

4:5

Francisco's recipe calls for 3 cups of white flour and 2 cups of whole wheat flour. In this recipe, what is the

ratio of whole wheat flour to white flour?

RA	TIO		page 4
25.	Mrs. Nuno's monthly salary is \$1800. She pays \$300 a month for rent. What is the ratio of her <b>rent</b> to the amount she <b>has left</b> after paying rent?  ① ② ③ ④ ⑤  (1) 5:1  (2) 1:5  (3) 1:6  (4) 6:1  (5) 7:1	30.	In Margie's class there are 14 girls and 12 boys. Find the ratio of <b>girls</b> to <b>boys</b> in this class.  ① ② ③ ④ ⑤  (1) 6:7  (2) 7:6  (3) 1:6  (4) 12:1  (5) 14:1  When he remodeled his house, Anthony spent \$2400
26.	Virginia weighed 150 pounds in March. By the following September, she had lost 30 pounds. Find the ratio of her March weight to her September weight.  ① ② ③ ④ ⑤  (1) 4 to 3  (2) 3 to 4  (3) 5 to 4  (4) 5 to 1	32.	for materials and \$4200 for labor. Find the ratio of the <a href="Labor">Labor</a> costs to the cost of <a href="materials">materials</a> .  ① ② ③ ④ ⑤  (1) 7:4  (2) 4:7  (3) 4:3  (4) 7:3  (5) 3:7  Three of Becky's children are girls, and two are boys.
27.	(5) 1 to 5  Diana has paid off \$1500 on a \$5000 car loan. What is the ratio of the amount she has already <b>paid</b> to the amount she still <b>owes</b> ?  ① ② ③ ④ ⑤  (1) 7:3 (2) 3:5 (3) 3:7 (4) 5:3 (5) 3:4	33.	What is the ratio of <b>boys</b> to <b>girls</b> in Becky's family?  ① ② ③ ④ ⑤  (1) 2:3  (2) 3:2  (3) 3:1  (4) 1:3  (5) 4:1  Dolores earns \$5.00 an hour. Her husband Manuel earns \$3.75 an hour. What is the ratio of <b>Manuel's</b> earnings to <b>Dolores's</b> earnings?
28.	On a test, Arsenia got 40 problems right and 16 problems wrong. What is the ratio of the number she got <u>right</u> to the <u>total</u> number of problems?  ① ② ③ ④ ⑤  (1) 5:7		① ② ③ ④ ⑤ (1) 4:3 (2) 3:4 (3) 1:4 (4) 5:1

(5)

6:5

34. In town, Richard gets an average of 15 miles per gallon. In the country, he gets an average of 25 miles per gallon. What is the ratio of Richard's **town** mileage to his country mileage?

	0	0	0	
0	0	0	0	0
0	0	0	0	0
1	1	1	1	1
@	@	@	@	2
3	3	3	3	3
4	4	4	4	4
6	(5)	(5)	(5)	(5)
6	6	6	6	6
Ø	<b>(</b>	7	<b>(</b>	9
8	8	8	8	8
9	9	9	9	9

- 35. At the Pueblo Power Company, 80 workers are women and 440 are men. What is the ratio of **men** to **women** at the company?
  - ① ② ③ ④ ⑤
  - (1) 2:11
  - (2) 11:2
  - (3) 2:1
  - (4) 12:1
  - (5) 2:13
- 36. What is the ratio of <u>6 ounces</u> to <u>a pint</u>? (1 pint = 16 ounces)
  - ① ② ③ ④ ⑤
  - (1) 1:4
  - (2) 3:8
  - (3) 6:1
  - (4) 3:16
  - (5) 1:16
- 37. The Mitchell's gross income is \$960 a month. They pay \$180 for rent. What is the ratio of the Mitchell's **rent** to their **income**?
  - ① ② ③ ④ ⑤
  - (1) 2:8
  - (2) 3:16
  - (3) 16:3
  - (4) 1:96
  - (5) 10:1

38. Maxine's living room is 12 feet wide and 18 feet long. What is the ratio of the **length** of the room to the **width**?

	0	0	0	
0	0	0	0	0
0	<b>(</b>	0	<b>(</b>	0
1	0	Θ	0	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
<b>⑤</b>	(5)	(5)	(5)	(5)
6	6	6	6	6
Ø	Ø	Ø	Ø	Ø
8	8	8	8	8
9	9	9	9	9

- 39. Manuel's gross salary is \$210 a week. Manuel's employer deducts \$42 each week for taxes and social security. What is the ratio of the **deductions** to Manuel's **gross salary**?
  - 1 2 3 4 5
  - (1) 1:3
  - (2) 1:5
  - (3) 1:7
  - (4) 1:6
  - (5) 1:8
- 40. What is the ratio of <u>9 inches</u> to <u>a yard</u>? (1 yard = 36 inches)
  - ① ② ③ ④ ⑤
  - (1) 1:2
  - (2) 1:3
  - (3) 1:4
  - (4) 1:5
  - (5) 1:6
- 41. The Estradas had a \$30,000 mortgage on their house. So far, they have paid \$12,000 toward the mortgage. What is the ratio of the amount the Estradas <a href="have paid">have paid</a> to the <a href="total">total</a> amount of the mortgage?
  - 1 2 3 4 5
  - (1) 1:3
  - (2) 2:5
  - (3) 3:5
  - (4) 4:5
  - (5) 5:2

- 42. Michael got 5 problems wrong on a test. The test had 40 problems. What was the ratio of the number of problems Michael got <u>right</u> to the <u>total</u> number of problems on the test?
  - ① ② ③ ④ ⑤
  - (1) 1:2
  - (2) 2:3
  - (3) 3:8
  - (4) 7:8
  - (5) 5:4
- 43. In January, Jimmy weighed 240 pounds. By September, Jimmy lost 60 pounds. What is the ratio of Jimmy's **September** weight to his **January** weight?

	0	0	0	
0	0	0	0	0
0	0	0	0	0
1	0	1	0	1
2	@	@	@	@
3	3	(3)	3	(3)
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
Ø	6	<b>(</b>	<b>(</b>	6
8	8	8	8	8
9	9	9	9	9