MULTIPLY when the problem gives a %. Sometimes you have to add. Sometimes you have to subtract.	**DIVIDE** when the problem asks what percent. First, set the problem up as a fraction. $\frac{\text{part in the question}}{\text{total or original amount}}$

1. Pauline's Shoe Store pays $12 for a pair of children's shoes. She puts a 65% **markup** on the shoes.

   What is the **total** price for a pair of shoes at Pauline's Shoe Store?

   ① ② ③ ④ ⑤

   (1) $4.80
   (2) $7.80
   (3) $19.80
   (4) $20.40
   (5) $21.40

2. Fred paid a deposit of $1,500 on a car that cost a total of $15,000.

   What percent is the **deposit** of the total cost of the car?

   ① ② ③ ④ ⑤

   (1) 5%
   (2) 6%
   (3) 10%
   (4) 90%
   (5) 95%

3. Memorial Auditorium has a total of 1280 seats. At a recent concert 256 seats were empty.

   What percent of the seats were **empty**?

   ① ② ③ ④ ⑤

   (1) 2%
   (2) 20%
   (3) 25%
   (4) 80%
   (5) 90%

4. The Garcias have paid $24,000 of their total mortgage of $80,000.

   What percent have they **paid**?

   ① ② ③ ④ ⑤

   (1) 30%
   (2) 40%
   (3) 60%
   (4) 70%
   (5) 80%

5. Phil and his brother drove to the Grand Canyon. Phil drove 270 miles. His brother drove 630 miles.

   What percent of the trip did **Phil** drive?

   ① ② ③ ④ ⑤

   (1) 20%
   (2) 30%
   (3) 70%
   (4) 90%
   (5) 95%

6. Benny lives in a state that has a 6% **sales tax**.

   What **total** price will he pay for a suit that is on sale for $149.50?

   ① ② ③ ④ ⑤

   (1) $8.97
   (2) $158.47
   (3) $162.74
   (4) $181.97
   (5) $192.87

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MULTIPLY **when the problem gives a %.** **Sometimes you have to add.** **Sometimes you have to subtract.**	**DIVIDE** **when the problem asks what percent.** **First, set the problem up as a fraction.** part in the question total or original amount

7. AM Realty charges a real estate **commission** of 4%. Bill sold a house for $72,000.

   How much **commission** will he earn?

   ① ② ③ ④ ⑤

   (1) $2,800.00
   (2) $2,880.00
   (3) $28,800.00
   (4) $28,880.00
   (5) $29,990.00

8. Cindy owns a beauty shop. She makes a **profit** of 75% on hair products she sells.

   What is the **total** price Cindy should charge for shampoo that costs her $4.80?

   ① ② ③ ④ ⑤

   (1) $.36
   (2) $3.60
   (3) $7.40
   (4) $8.40
   (5) $9.40

9. Daniel's backhoe was worth $38,000 at the beginning of the 2007. By the end of the year, it had **depreciated** (gone down in value) at a rate of 15%.

   What is the backhoe's value at the end of the 2007?

   ① ② ③ ④ ⑤

   (1) $3,230
   (2) $5,700
   (3) $32,300
   (4) $43,700
   (5) $53,700

10. Sally bought a sweater marked 40% **off**.

    What is the **sale price** if the original price was listed as $42.50?

    ① ② ③ ④ ⑤

    (1) $1.70
    (2) $17.00
    (3) $25.00
    (4) $25.50
    (5) $25.90

11. Three months ago there were 20 students in Lee's GED class. During the last 3 months, the number of students **increased** by 10%.

    Which expression shows the **total** number of students that are in the class now?

    ① ② ③ ④ ⑤

    (1) (.1 x 20) + 20
    (2) 20 / .1 + 20
    (3) (.1 x 20) – 20
    (4) 20 – .1 x 20
    (5) (1 x 20) + 20

12. Ten years ago 40,000 people lived in Glenwood Springs. The population has **decreased** by 20% over the past ten years.

    Which expression shows the town's population now?

    ① ② ③ ④ ⑤

    (1) 40,000 / (.20 x 40,000)
    (2) (.20 x 40,000) + 40,000
    (3) 40,000 – (.20 x 40,000)
    (4) (.20 x 40,000) – 40,000
    (5) 40,000 – (20 x 40,000)

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MULTIPLY **when the problem gives a %.** **Sometimes you have to add.** **Sometimes you have to subtract.**	**DIVIDE** **when the problem asks what percent.** **First, set the problem up as a fraction.** part in the question / total or original amount

13. Circuit City stock was selling for $24 a share on Monday. By Friday, the stock **dropped** 6%.

    What was the price of Circuit City stock on Friday?

    ① ② ③ ④ ⑤

    (1) $1.44
    (2) $22.56
    (3) $25.44
    (4) $30.00
    (5) $40.00

14. Ron took a 4% **cut** in pay to take a new job near his house. He was making $16,000 a year at his old job.

    How much does Ron make at his new job?

    ① ② ③ ④ ⑤

    (1) $12,000
    (2) $15,360
    (3) $15,630
    (4) $15,936
    (5) $15,996

15. Mr. Richards bought a boat for $9,400. He paid a 4% **sales tax**.

    What was the **total** cost of the boat?

    ① ② ③ ④ ⑤

    (1) $3,760
    (2) $9,767
    (3) $9,776
    (4) $9,800
    (5) $12,900

16. Before Christmas, men's jackets sold for $85. After Christmas, the price of the jackets **decreased** by $17.

    The **decrease** after Christmas was **what percent** of the original price?

    ① ② ③ ④ ⑤

    (1) 10%
    (2) 15%
    (3) 20%
    (4) 25%
    (5) 35%

17. Jake owns a hardware store. He pays $16 for an electric drill. Jake charges his customers a 30% **markup**.

    What is the **total** price a customer pays for the drill?

    ① ② ③ ④ ⑤

    (1) $13.20
    (2) $16.30
    (3) $20.20
    (4) $20.80
    (5) $22.80

18. Allen bought a car last year for $3,600. This year the car depreciated by $720.

    The **depreciation** is **what percent** of last year's value?

    ① ② ③ ④ ⑤

    (1) 2%
    (2) 20%
    (3) 25%
    (4) 80%
    (5) 90%

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MULTIPLY **when the problem gives a %.** **Sometimes you have to add.** **Sometimes you have to subtract.**	**DIVIDE** **when the problem asks what percent.** **First, set the problem up as a fraction.** part in the question total or original amount

19. David bought a used bicycle for $60. After repairing and repainting it, he wants to make a **profit** of 35%.

    What is the **total** amount David should charge for the bicycle?

    ① ② ③ ④ ⑤

    (1) $39.00
    (2) $63.50
    (3) $81.00
    (4) $95.00
    (5) $105.00

20. Sylvia wants to buy a new typewriter. At Tom's Typewriters, the model Sylvia wants is 10% **off**. The regular price is $249.

    What is the **sale price** of the typewriter at Tom's?

    ① ② ③ ④ ⑤

    (1) $224.10
    (2) $225.90
    (3) $239.00
    (4) $273.10
    (5) $283.10

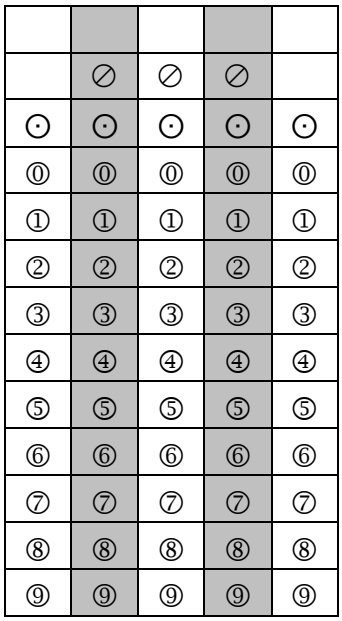
21. Paint that regularly sells for $15.90 per gallon is on sale at a 20% **discount**.

    Which expression shows how to find the **sale price**?

    ① ② ③ ④ ⑤

    (1) .2($15.90) – $15.90
    (2) $15.90 – .2($15.90)
    (3) $15.90 ÷ .2($15.90)
    (4) $15.90 – .2
    (5) $15.90 – 2($15.90)

22. Of the 1,500 calculators produced each week, 3% are **defective**. How many **defective** calculators are made each week?



23. Georgia made a **down payment** of 6% on a car that cost $7,280.

    How much is the **down payment**?

    ① ② ③ ④ ⑤

    (1) $43.68
    (2) $403.68
    (3) $436.00
    (4) $436.08
    (5) $436.80

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MULTIPLY **when the problem gives a %.** **Sometimes you have to add.** **Sometimes you have to subtract.**	**DIVIDE** **when the problem asks what percent.** **First, set the problem up as a fraction.** part in the question total or original amount

24. When Bert started working at his present job, he made $5.00 an hour. He got a 15% hourly **raise** in May.

    What is Bert's **new salary** after his raise in May?

    ① ② ③ ④ ⑤

    (1) $.75
    (2) $4.25
    (3) $5.15
    (4) $5.75
    (5) $6.00

Questions 25 and 26 refer to the following information.

The auditorium in the Greeley Town Hall has 500 seats. At a meeting, 50 seats were empty.

25. **What percent** of the seats were **empty**?

    ① ② ③ ④ ⑤

    (1) 8%
    (2) 10%
    (3) 11%
    (4) 12 ½%
    (5) 25%

26. **What percent** of the seats were **filled**?

    ① ② ③ ④ ⑤

    (1) 2%
    (2) 10%
    (3) 15%
    (4) 90%
    (5) 95%

27. Emma paid $.50 in sales tax on a book, which cost $12.50.

    The **tax** was **what percent** of the price of the book?

    ① ② ③ ④ ⑤

    (1) 4%
    (2) $4\ ^{2}/_{3}\%$
    (3) 6%
    (4) 25%
    (5) 40%

28. The Montoyas spend $125 a week for food. Their weekly budget is $500.

    What percent of their budget goes for **food**?

    ① ② ③ ④ ⑤

    (1) 5%
    (2) 15%
    (3) 20%
    (4) 25%
    (5) 75%

29. Find the **interest** on a $2,500 loan at a rate of 12.5% for one year. Use the formula

    I = P R T

    ① ② ③ ④ ⑤

    (1) $3.12
    (2) $31.25
    (3) $301.25
    (4) $312.50
    (5) $3,125

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MULTIPLY **when the problem gives a %.** **Sometimes you have to add.** **Sometimes you have to subtract.**	**DIVIDE** **when the problem asks what percent.** **First, set the problem up as a fraction.** part in the question total or original amount

30. Find the **interest** on $480 at 6% for one year and six months.
Use the formula
I = P R T

① ② ③ ④ ⑤
(1) $4.32
(2) $20.80
(3) $28.80
(4) $43.20
(5) $432.00

31. The Luceros **have paid off** 70% of their $30,000 mortgage.

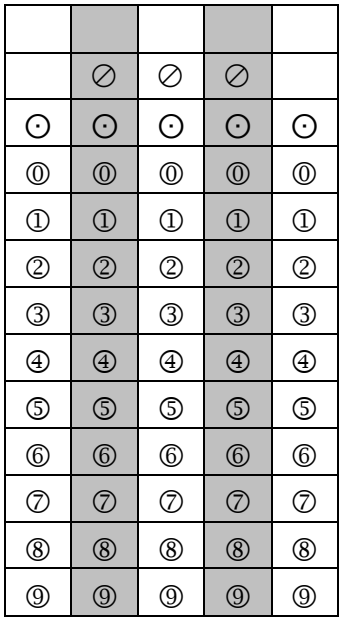
How much do they **still have left** to pay?
① ② ③ ④ ⑤
(1) $900
(2) $2,100
(3) $8,000
(4) $9,000
(5) $21,000

32. The **sales tax rate** is 6%.

Find the **sales tax** on an automobile purchase of $12,500.
① ② ③ ④ ⑤
(1) $.75
(2) $75.00
(3) $750.00
(4) $7,500.00
(5) $75,000.00

33. Juan paid **6% sales tax** on a $1,600 computer.

What **total** price did he pay for the computer?



34. Payless Shoe Store is advertising a 40% **discount** on all shoes.

Find the **discount** on a pair of shoes priced at $45.
① ② ③ ④ ⑤
(1) $.81
(2) $8.10
(3) $18.00
(4) $180.00
(5) $190.00

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MULTIPLY when the problem gives a %. Sometimes you have to add. Sometimes you have to subtract.	**DIVIDE** when the problem asks what percent. First, set the problem up as a fraction. $\frac{\text{part in the question}}{\text{total or original amount}}$

35. Michelle, a realtor from Mestas Realty, earned a 5% **commission** on the sale of a home that sold for $108,000.

    How much **commission** did Michelle earn on this sale?

    ① ② ③ ④ ⑤

    (1) $540
    (2) $5,400
    (3) $54,000
    (4) $540,000
    (5) $5,400,000

36. Louie plans to leave a 15% **tip** at a restaurant. His bill is $13.

    How much should Louie leave for the **tip**?

	⊘	⊘	⊘	
⊙	⊙	⊙	⊙	⊙
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

37. Christina bought a dress on sale for 25% **off**. The original price was $80. Find the **sale price.**

    ① ② ③ ④ ⑤

    (1) $20.00
    (2) $60.00
    (3) $100.00
    (4) $160.00
    (5) $165.00

Questions 38 and 39 refer to the following information.

There are 30 problems on the math exam. Melissa got 70% correct.

38. How many problems were **correct**?

    ① ② ③ ④ ⑤

    (1) 4
    (2) 9
    (3) 21
    (4) 29
    (5) 39

39. How many problems were **incorrect**?

    ① ② ③ ④ ⑤

    (1) 4
    (2) 9
    (3) 21
    (4) 29
    (5) 30

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MULTIPLY when the problem gives a %. Sometimes you have to add. Sometimes you have to subtract.	**DIVIDE** when the problem asks what percent. First, set the problem up as a fraction. $\frac{\text{part in the question}}{\text{total or original amount}}$

Questions 40 and 41 refer to the following information.

Otero Junior College's basketball coach reported that 80% of the team's 20 games were wins.

40. How many games were **wins**?
① ② ③ ④ ⑤
(1) 4
(2) 12
(3) 16
(4) 20
(5) 22

41. How many games were **losses**?
① ② ③ ④ ⑤
(1) 4
(2) 10
(3) 16
(4) 20
(5) 22

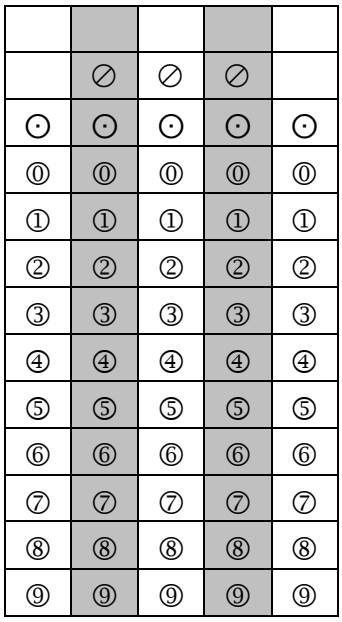
42. Every month Laura **saves** 10% of her gross earnings. Each month she earns $2,500.

How much will Laura save in **one year**?
① ② ③ ④ ⑤
(1) $250.00
(2) $2,500.00
(3) $3,000.00
(4) $30,000.00
(5) $35,000.00

Questions 43 and 44 refer to the following information.

1,000 lockers are made at Monnet Manufacturing each month. The company claims that each month **2% of its lockers are defective**.

43. How many of these lockers **are defective**?



44. How many of these lockers **are not defective**?
① ② ③ ④ ⑤
(1) 98
(2) 980
(3) 998
(4) 1,002
(5) 1,200

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