

DIVISION BY ESTIMATION

ANSWERS

HELPFUL EXAMPLES

A.

$$3 \overline{)58} \rightarrow 3 \overline{)60} \rightarrow 3 \times 10 = 60$$

ESTIMATE THE DIVIDEND (INSIDE NUMBER) SO THAT YOU CAN QUICKLY FIND THE QUOTIENT (ANSWER).

WHICH MEANS
 $58 \div 3$ IS ABOUT 10

B.

40 = 4 TENS
 360 = 36 TENS

$$42 \overline{)356} \rightarrow 40 \overline{)360} \rightarrow 4 \overline{)36} \overset{9}{}$$

ESTIMATE THE DIVIDEND (INSIDE NUMBER) AND THE DIVISOR (OUTSIDE NUMBER). 42 CHANGES TO 40 AND 356 CHANGES TO 360. IN OTHER WORDS, YOU HAVE 36 TENS DIVIDED BY 4 TENS, WHICH EQUALS 9.

NOW YOUR TURN. DIVIDE USING ESTIMATION. SHOW YOUR ESTIMATIONS.

****ANSWERS MAY VARY****

1. $\boxed{4} \quad \boxed{80}$

$$4 \overline{)82}$$

$$4 \overline{)80} = 20$$

or $4 \times 20 = 80$

2. $2 \overline{)47}$
 25

3. $3 \overline{)91}$
 30

4. $7 \overline{)74}$
 10

5. $5 \overline{)98}$
 20

6. $3 \overline{)61}$
 20

7. $8 \overline{)79}$
 10

8. $5 \overline{)76}$
 25 OR 26

9. $4 \overline{)43}$
 10

10. $2 \overline{)39}$
 20

11. $\boxed{4} \quad \boxed{400}$

$$4 \overline{)402}$$

$$4 \overline{)400} = 100$$

or $4 \times 100 = 400$

12. $9 \overline{)268}$
 30

13. $2 \overline{)603}$
 300

14. $5 \overline{)993}$
 200

15. $6 \overline{)244}$
 40

16. $3 \overline{)151}$
 50

17. $2 \overline{)396}$
 200

18. $7 \overline{)137}$
 20

19. $4 \overline{)362}$
 90

20. $8 \overline{)475}$
 60

21. $\boxed{80} \quad \boxed{640}$

21. $78 \overline{)638}$

HIDE THE ZEROS.

$$8 \overline{)64} = 8$$

or $80 \times 8 = 640$

22. $31 \overline{)273}$
 9

23. $52 \overline{)245}$
 5

24. $67 \overline{)416}$
 6

25. $19 \overline{)142}$
 7

26. $83 \overline{)317}$
 4

27. $99 \overline{)804}$
 8

28. $64 \overline{)358}$
 6

29. $12 \overline{)303}$
 30

30. $35 \overline{)436}$
 11