MULTIPLICATION - LEVEL 2

MULTIPLICATION FACTS - CHART 2

1	X	**1**	=	1	1	X	**2**	=	2	1	X	**3**	=	3	1	X	**4**	=	4
2	X	**1**	=	2	2	X	**2**	=	4	2	X	**3**	=	6	2	X	**4**	=	8
3	X	**1**	=	3	3	X	**2**	=	6	3	X	**3**	=	9	3	X	**4**	=	12
4	X	**1**	=	4	4	X	**2**	=	8	4	X	**3**	=	12	4	X	**4**	=	16
5	X	**1**	=	5	5	X	**2**	=	10	5	X	**3**	=	15	5	X	**4**	=	20
6	X	**1**	=	6	6	X	**2**	=	12	6	X	**3**	=	18	6	X	**4**	=	24
7	X	**1**	=	7	7	X	**2**	=	14	7	X	**3**	=	21	7	X	**4**	=	28
8	X	**1**	=	8	8	X	**2**	=	16	8	X	**3**	=	24	8	X	**4**	=	32
9	X	**1**	=	9	9	X	**2**	=	18	9	X	**3**	=	27	9	X	**4**	=	36
10	X	**1**	=	10	10	X	**2**	=	20	10	X	**3**	=	30	10	X	**4**	=	40
11	X	**1**	=	11	11	X	**2**	=	22	11	X	**3**	=	33	11	X	**4**	=	44
12	X	**1**	=	12	12	X	**2**	=	24	12	X	**3**	=	36	12	X	**4**	=	48
13	X	**1**	=	13	13	X	**2**	=	26	13	X	**3**	=	39	13	X	**4**	=	52
1	X	**5**	=	5	1	X	**6**	=	6	1	X	**7**	=	7	1	X	**8**	=	8
2	X	**5**	=	10	2	X	**6**	=	12	2	X	**7**	=	14	2	X	**8**	=	16
3	X	**5**	=	15	3	X	**6**	=	18	3	X	**7**	=	21	3	X	**8**	=	24
4	X	**5**	=	20	4	X	**6**	=	24	4	X	**7**	=	28	4	X	**8**	=	32
5	X	**5**	=	25	5	X	**6**	=	30	5	X	**7**	=	35	5	X	**8**	=	40
6	X	**5**	=	30	6	X	**6**	=	36	6	X	**7**	=	42	6	X	**8**	=	48
7	X	**5**	=	35	7	X	**6**	=	42	7	X	**7**	=	49	7	X	**8**	=	56
8	X	**5**	=	40	8	X	**6**	=	48	8	X	**7**	=	56	8	X	**8**	=	64
9	X	**5**	=	45	9	X	**6**	=	54	9	X	**7**	=	63	9	X	**8**	=	72
10	X	**5**	=	50	10	X	**6**	=	60	10	X	**7**	=	70	10	X	**8**	=	80
11	X	**5**	=	55	11	X	**6**	=	66	11	X	**7**	=	77	11	X	**8**	=	88
12	X	**5**	=	60	12	X	**6**	=	72	12	X	**7**	=	84	12	X	**8**	=	96
13	X	**5**	=	65	13	X	**6**	=	78	13	X	**7**	=	91	13	X	**8**	=	104
1	X	**9**	=	9	1	X	**10**	=	10	1	X	**11**	=	11	1	X	**12**	=	12
2	X	**9**	=	18	2	X	**10**	=	20	2	X	**11**	=	22	2	X	**12**	=	24
3	X	**9**	=	27	3	X	**10**	=	30	3	X	**11**	=	33	3	X	**12**	=	36
4	X	**9**	=	36	4	X	**10**	=	40	4	X	**11**	=	44	4	X	**12**	=	48
5	X	**9**	=	45	5	X	**10**	=	50	5	X	**11**	=	55	5	X	**12**	=	60
6	X	**9**	=	54	6	X	**10**	=	60	6	X	**11**	=	66	6	X	**12**	=	72
7	X	**9**	=	63	7	X	**10**	=	70	7	X	**11**	=	77	7	X	**12**	=	84
8	X	**9**	=	72	8	X	**10**	=	80	8	X	**11**	=	88	8	X	**12**	=	96
9	X	**9**	=	81	9	X	**10**	=	90	9	X	**11**	=	99	9	X	**12**	=	108
10	X	**9**	=	90	10	X	**10**	=	100	10	X	**11**	=	110	10	X	**12**	=	120
11	X	**9**	=	99	11	X	**10**	=	110	11	X	**11**	=	121	11	X	**12**	=	132
12	X	**9**	=	108	12	X	**10**	=	120	12	X	**11**	=	132	12	X	**12**	=	144
13	X	**9**	=	117	13	X	**10**	=	130	13	X	**11**	=	143	13	X	**12**	=	156
															13	X	**13**	=	169

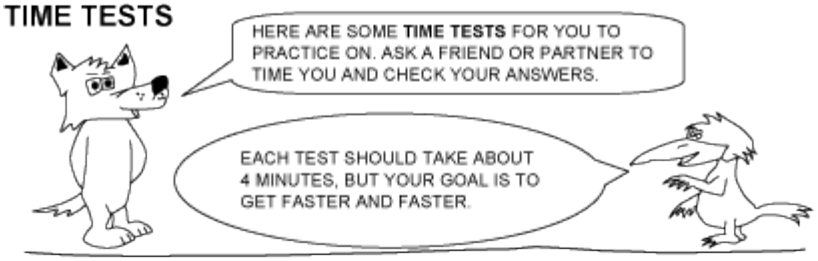
REVIEW - C

35 IS A MULTIPLE OF 5 AND 7, BECAUSE 5 X 7 = 35.

THE WORD, ***MULTIPLE***, JUST MEANS THE ANSWER YOU GET WHEN YOU MULTIPLY.

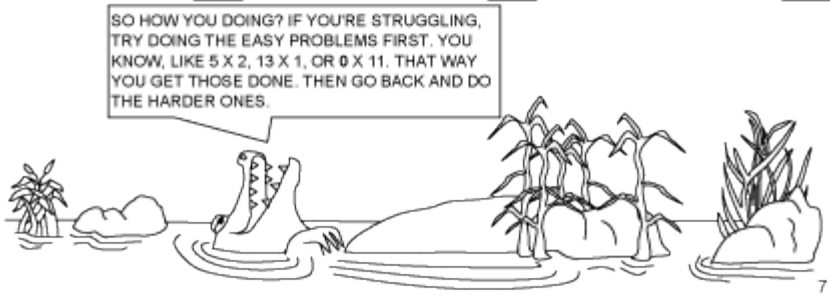
5 X 7 = _____	11 X 6 = _____	10 X 10 = _____
12 X 4 = _____	13 X 11 = _____	4 X 4 = _____
13 X 10 = _____	5 X 3 = _____	2 X 2 = _____
7 X 2 = _____	11 X 9 = _____	1 X 7 = _____
0 X 10 = _____	4 X 8 = _____	11 X 7 = _____
2 X 3 = _____	5 X 5 = _____	4 X 5 = _____
4 X 7 = _____	8 X 7 = _____	6 X 10 = _____
7 X 4 = _____	9 X 8 = _____	9 X 11 = _____
11 X 10 = _____	12 X 1 = _____	12 X 9 = _____
3 X 7 = _____	6 X 2 = _____	4 X 2 = _____
13 X 12 = _____	8 X 8 = _____	2 X 4 = _____
5 X 6 = _____	8 X 13 = _____	0 X 8 = _____
9 X 11 = _____	9 X 12 = _____	11 X 12 = _____
5 X 7 = _____	11 X 9 = _____	5 X 9 = _____
7 X 4 = _____	10 X 6 = _____	7 X 7 = _____
4 X 10 = _____	7 X 11 = _____	9 X 4 = _____
12 X 9 = _____	6 X 8 = _____	11 X 9 = _____
3 X 3 = _____	2 X 12 = _____	10 X 7 = _____
12 X 0 = _____	10 X 0 = _____	6 X 5 = _____
6 X 2 = _____	5 X 5 = _____	4 X 4 = _____
9 X 9 = _____	4 X 3 = _____	12 X 12 = _____
11 X 7 = _____	9 X 12 = _____	3 X 3 = _____
6 X 5 = _____	12 X 11 = _____	11 X 9 = _____
9 X 12 = _____	8 X 8 = _____	4 X 7 = _____
7 X 9 = _____	4 X 5 = _____	9 X 10 = _____
4 X 0 = _____	6 X 6 = _____	5 X 12 = _____
7 X 3 = _____	8 X 8 = _____	4 X 8 = _____
6 X 7 = _____	9 X 9 = _____	6 X 6 = _____

TIME TESTS

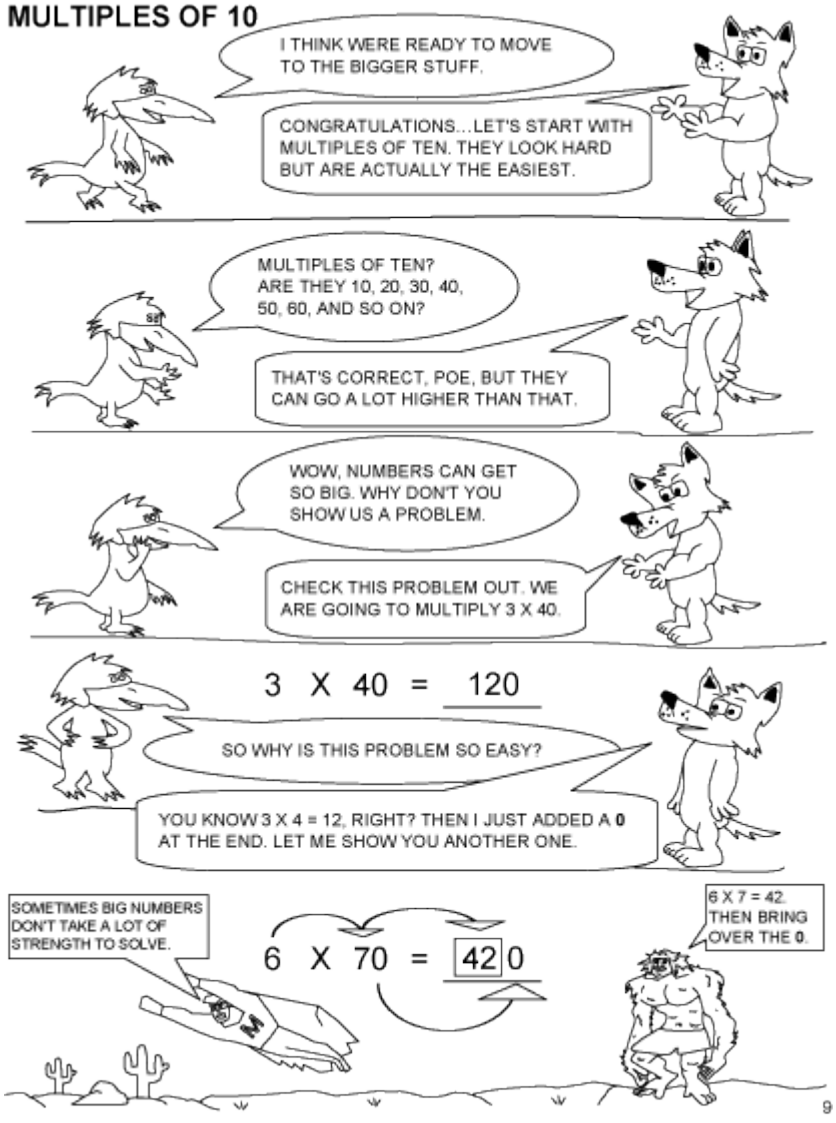


TIME TEST - A

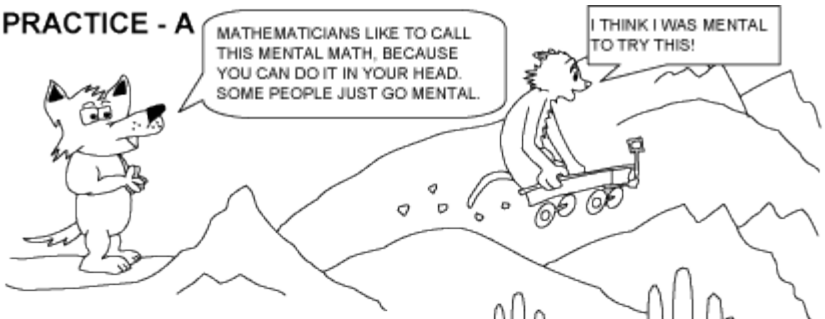
6	X	13	=	____	6	X	12	=	____	13	X	4	=	____
11	X	4	=	____	13	X	1	=	____	3	X	7	=	____
3	X	2	=	____	13	X	7	=	____	8	X	8	=	____
12	X	11	=	____	2	X	4	=	____	13	X	13	=	____
8	X	9	=	____	13	X	12	=	____	13	X	5	=	____
10	X	3	=	____	12	X	9	=	____	7	X	4	=	____
9	X	11	=	____	5	X	1	=	____	9	X	9	=	____
5	X	5	=	____	4	X	13	=	____	2	X	2	=	____
7	X	7	=	____	12	X	11	=	____	8	X	6	=	____
8	X	4	=	____	9	X	11	=	____	9	X	13	=	____
5	X	2	=	____	5	X	5	=	____	0	X	11	=	____
3	X	13	=	____	6	X	8	=	____	10	X	8	=	____
8	X	4	=	____	9	X	13	=	____	5	X	9	=	____
5	X	2	=	____	13	X	11	=	____	13	X	7	=	____
3	X	13	=	____	7	X	10	=	____	11	X	2	=	____



MULTIPLES OF 10



PRACTICE - A



HELPFUL EXAMPLE

4 X 1,200 =

(4) X (12)00 = (48)00 = 4,800

1. 3 X 50 = _____
   3 X 500 = _____
   3 X 5,000 = _____

2. 2 X 8,000 = _____
   2 X 80 = _____
   2 X 800 = _____

3. 9 X 2 = _____
   9 X 2,000 = _____
   9 X 200 = _____

4. 6 X 300 = _____
   6 X 30 = _____
   6 X 30,000 = _____

5. 4 X 7,000 = _____
   4 X 70 = _____
   4 X 700 = _____

6. 9 X 4 = _____
   9 X 400 = _____
   9 X 4,000 = _____

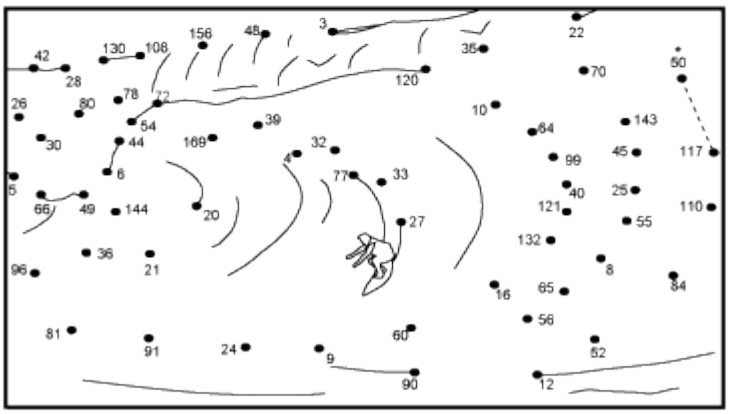
7. 8 X 30 = _____
   8 X 3,000 = _____
   8 X 300 = _____

8. 11 X 2 = _____
   11 X 200 = _____
   11 X 2,000 = _____

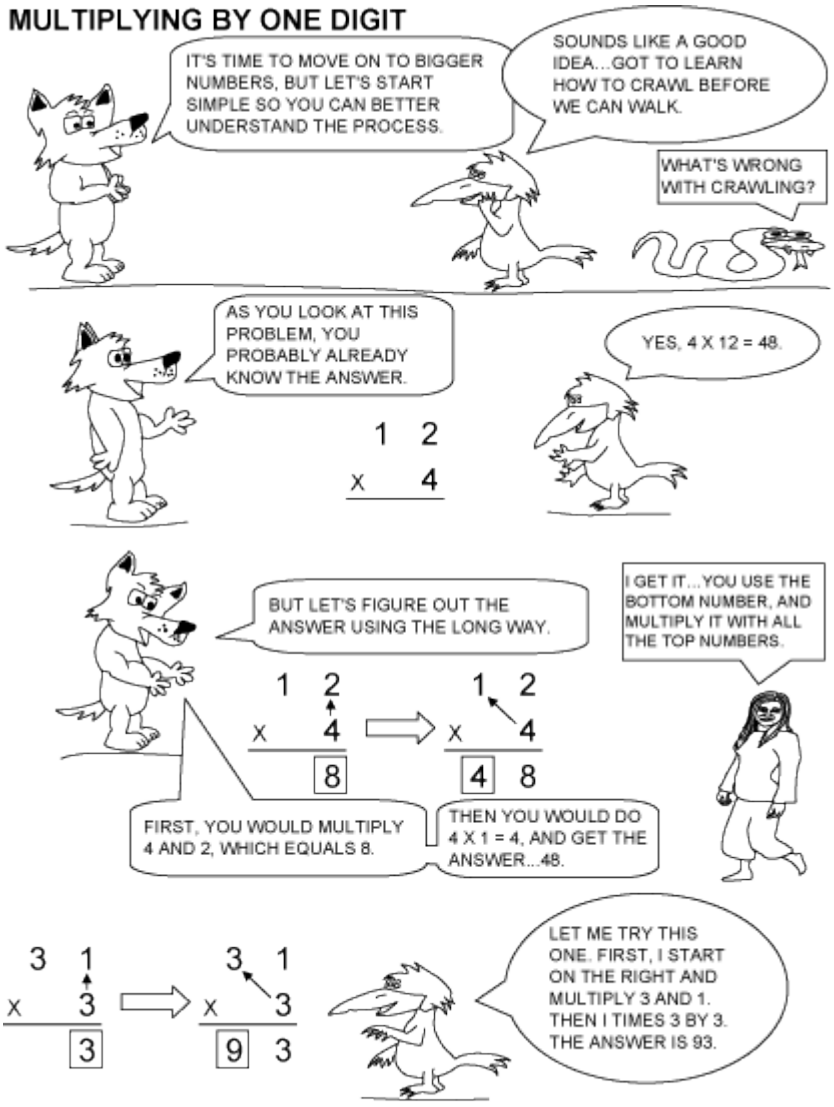
DIRECTIONS: NAME: _____

ANSWER THE PROBLEMS BELOW AND CONNECT THE DOTS IN THE ORDER YOU CREATED.
I STARTED THE PATTERN FOR YOU…NOW YOU DO THE REST.
NOTE: PATTERNS ARE **NOT** CONNECTED TOGETHER.

PATTERN #1	PATTERN #2	PATTERN #3	PATTERN #4
10 X 5 = 50	9 X 3 = ____	2 X 11 = ____	6 X 7 = ____
9 X 13 = 117	11 X 3 = ____	7 X 5 = ____	13 X 2 = ____
11 X 10 = ____	8 X 4 = ____	12 X 10 = ____	5 X 1 = ____
12 X 7 = ____	3 X 13 = ____	5 X 2 = ____	6 X 11 = ____
4 X 13 = ____	9 X 8 = ____	8 X 8 = ____	5 X 6 = ____
3 X 4 = ____	1 X 3 = ____	9 X 11 = ____	7 X 4 = ____
9 X 10 = ____	4 X 12 = ____	5 X 8 = ____	10 X 13 = ____
8 X 7 = ____	13 X 12 = ____	11 X 11 = ____	10 X 8 = ____
13 X 5 = ____	12 X 9 = ____	12 X 11 = ____	7 X 7 = ____
2 X 4 = ____	6 X 13 = ____	2 X 8 = ____	3 X 2 = ____
11 X 5 = ____	11 X 4 = ____	10 X 6 = ____	12 X 12 = ____
5 X 5 = ____	6 X 9 = ____	3 X 3 = ____	9 X 4 = ____
9 X 5 = ____	13 X 13 = ____	3 X 8 = ____	12 X 8 = ____
13 X 11 = ____	2 X 2 = ____	13 X 7 = ____	3 X 7 = ____
7 X 10 = ____	7 X 11 = ____	9 X 9 = ____	5 X 4 = ____
LINE ENDS	LINE ENDS	LINE ENDS	LINE ENDS



MULTIPLYING BY ONE DIGIT



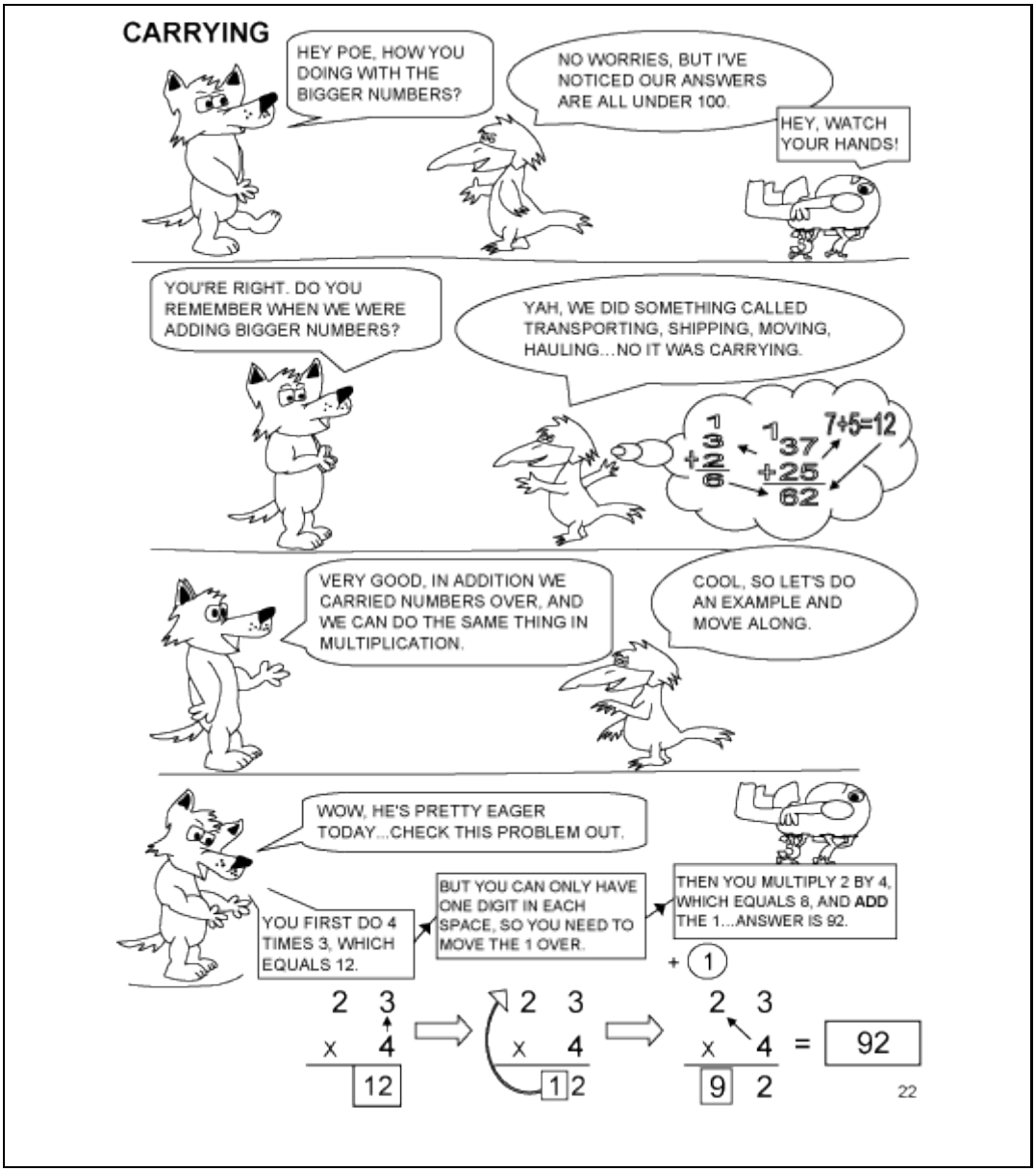
PRACTICE - A

MULTIPLY FROM RIGHT TO LEFT.

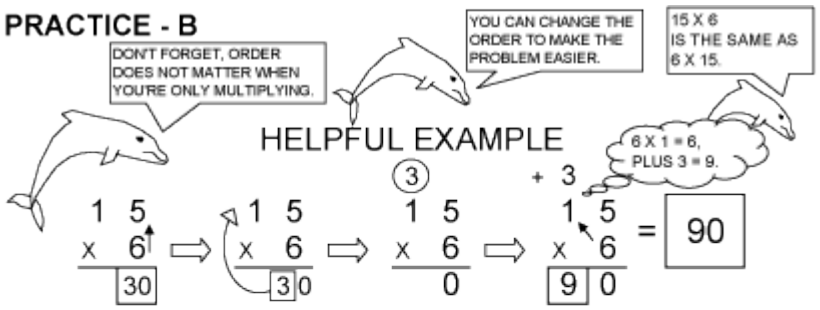
HELPFUL EXAMPLE

$$\begin{array}{r} 42 \\ \times\ 2 \\ \hline \end{array} \Rightarrow \begin{array}{r} 42 \\ \times\ 2 \\ \hline 4 \end{array} \Rightarrow \begin{array}{r} 42 \\ \times\ 2 \\ \hline 84 \end{array} = \boxed{84}$$

1. $\begin{array}{r} 34 \\ \times\ 2 \\ \hline \square\square \end{array}$
2. $\begin{array}{r} 12 \\ \times\ 4 \\ \hline \end{array}$
3. $\begin{array}{r} 33 \\ \times\ 3 \\ \hline \end{array}$
4. $\begin{array}{r} 14 \\ \times\ 2 \\ \hline \end{array}$
5. $\begin{array}{r} 22 \\ \times\ 3 \\ \hline \end{array}$
6. $\begin{array}{r} 44 \\ \times\ 2 \\ \hline \end{array}$
7. $\begin{array}{r} 30 \\ \times\ 3 \\ \hline \end{array}$
8. $\begin{array}{r} 85 \\ \times\ 1 \\ \hline \end{array}$
9. $\begin{array}{r} 24 \\ \times\ 2 \\ \hline \end{array}$
10. $\begin{array}{r} 43 \\ \times\ 2 \\ \hline \end{array}$
11. $\begin{array}{r} 40 \\ \times\ 2 \\ \hline \end{array}$
12. $\begin{array}{r} 22 \\ \times\ 4 \\ \hline \end{array}$
13. $\begin{array}{r} 31 \\ \times\ 2 \\ \hline \end{array}$
14. $\begin{array}{r} 78 \\ \times\ 0 \\ \hline \end{array}$
15. $\begin{array}{r} 21 \\ \times\ 3 \\ \hline \end{array}$
16. $\begin{array}{r} 11 \\ \times\ 6 \\ \hline \end{array}$
17. $\begin{array}{r} 13 \\ \times\ 3 \\ \hline \end{array}$
18. $\begin{array}{r} 42 \\ \times\ 2 \\ \hline \end{array}$
19. $\begin{array}{r} 30 \\ \times\ 2 \\ \hline \end{array}$
20. $\begin{array}{r} 64 \\ \times\ 0 \\ \hline \end{array}$
21. $\begin{array}{r} 67 \\ \times\ 1 \\ \hline \end{array}$
22. $\begin{array}{r} 20 \\ \times\ 4 \\ \hline \end{array}$
23. $\begin{array}{r} 11 \\ \times\ 8 \\ \hline \end{array}$
24. $\begin{array}{r} 31 \\ \times\ 3 \\ \hline \end{array}$
25. $\begin{array}{r} 33 \\ \times\ 2 \\ \hline \end{array}$


CARRYING
HEY POE, HOW YOU DOING WITH THE BIGGER NUMBERS?
NO WORRIES, BUT I'VE NOTICED OUR ANSWERS ARE ALL UNDER 100.
HEY, WATCH YOUR HANDS!
YOU'RE RIGHT. DO YOU REMEMBER WHEN WE WERE ADDING BIGGER NUMBERS?
YAH, WE DID SOMETHING CALLED TRANSPORTING, SHIPPING, MOVING, HAULING…NO IT WAS CARRYING.
7+5=12
VERY GOOD, IN ADDITION WE CARRIED NUMBERS OVER, AND WE CAN DO THE SAME THING IN MULTIPLICATION.
COOL, SO LET'S DO AN EXAMPLE AND MOVE ALONG.
WOW, HE'S PRETTY EAGER TODAY…CHECK THIS PROBLEM OUT.
YOU FIRST DO 4 TIMES 3, WHICH EQUALS 12.
BUT YOU CAN ONLY HAVE ONE DIGIT IN EACH SPACE, SO YOU NEED TO MOVE THE 1 OVER.
THEN YOU MULTIPLY 2 BY 4, WHICH EQUALS 8, AND ADD THE 1…ANSWER IS 92.
+ 1
2 3
x 4
12
2 3
x 4
12
2 3
x 4
9 2
= 92
22

PRACTICE - B



1. 3 x 32 = _____ 2. 4 x 17 = _____ 3. 3 x 27 = _____

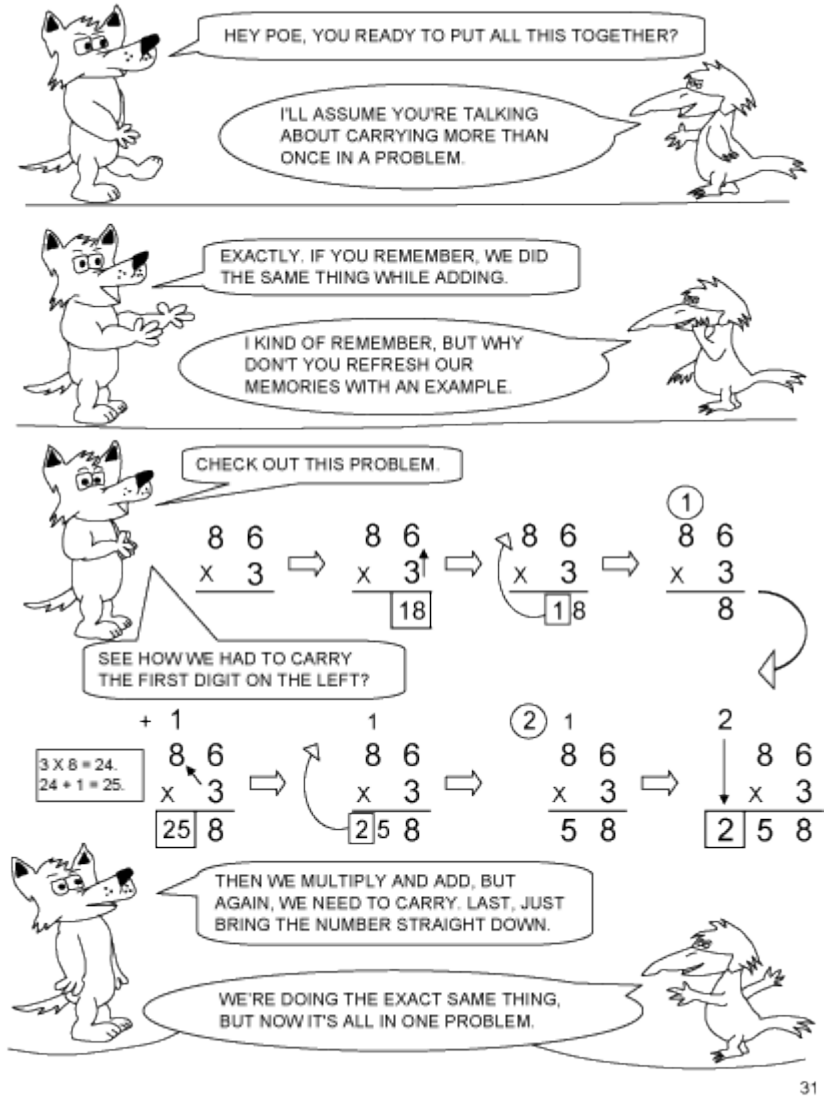
4. 6 x 14 = _____ 5. 12 X 8 = _____ 6. 4 X 21 = _____

7. 43 X 2 = _____ 8. 5 X 15 = _____ 9. 3 X 19 = _____

10. 12 X 6 = _____ 11. 0 X 68 = _____ 12. 21 X 4 = _____

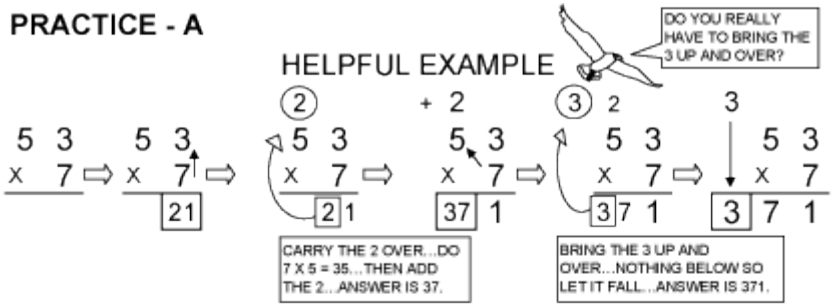
13. 3 X 20 = _____ 14. 39 X 2 = _____ 15. 7 X 13 = _____

DOUBLE CARRYING



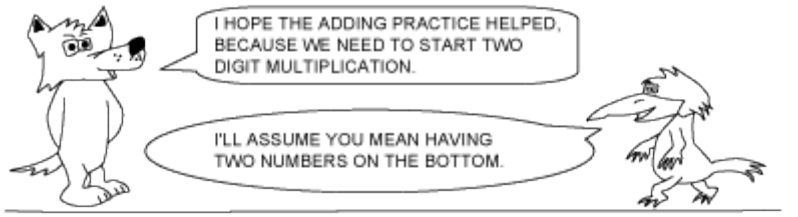
PRACTICE - A

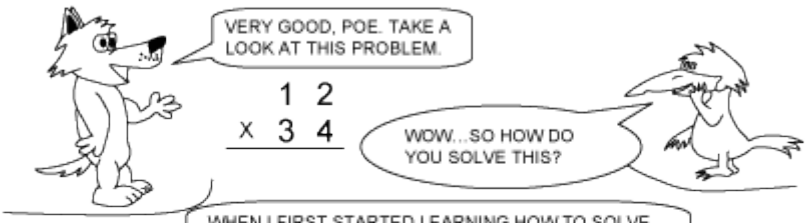
HELPFUL EXAMPLE

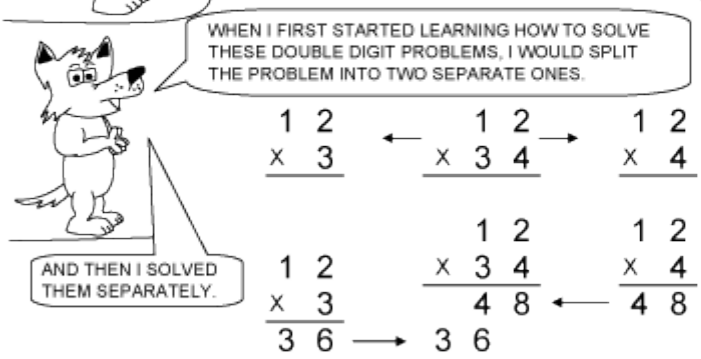


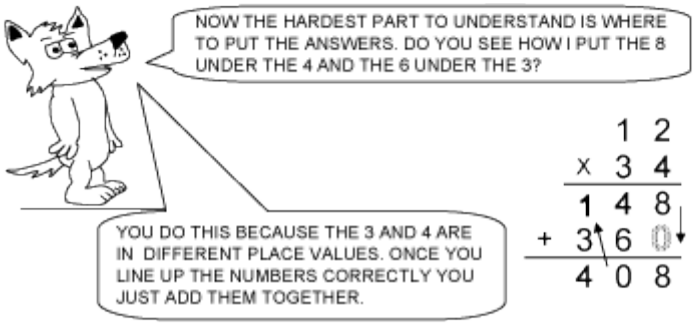
1. 43 x 5	2. 46 x 3	3. 81 x 6	4. 73 x 7	5. 99 x 4
6. 36 x 3	7. 62 x 8	8. 39 x 4	9. 87 x 2	10. 45 x 7
11. 85 x 9	12. 24 x 7	13. 70 x 6	14. 44 x 4	15. 28 x 6
16. 35 x 8	17. 77 x 3	18. 57 x 5	19. 32 x 7	20. 64 x 4
21. 23 x 7	22. 82 x 6	23. 38 x 4	24. 25 x 9	25. 47 x 5

MULTIPLYING BY 2 DIGITS









PRACTICE - B

1. 85 × 33

2. 38 × 40

3. 47 × 17

4. 61 × 29

5. 83 × 62

6. 91 × 74

7. 17 × 46

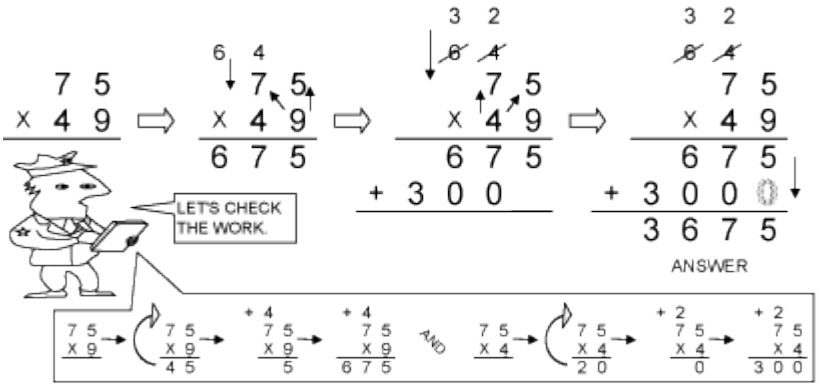
8. 46 × 17

9. 62 × 53

10. 59 × 24

PRACTICE - A

HELPFUL EXAMPLE



1. $\begin{array}{r} 56 \\ \times\ 27 \\ \hline \end{array}$

2. $\begin{array}{r} 77 \\ \times\ 38 \\ \hline \end{array}$

3. $\begin{array}{r} 42 \\ \times\ 61 \\ \hline \end{array}$

4. $\begin{array}{r} 34 \\ \times\ 39 \\ \hline \end{array}$

5. $\begin{array}{r} 81 \\ \times\ 45 \\ \hline \end{array}$

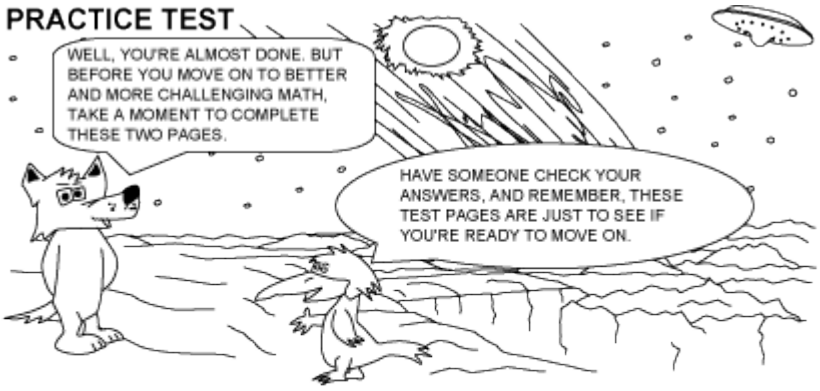
6. $\begin{array}{r} 53 \\ \times\ 24 \\ \hline \end{array}$

7. $\begin{array}{r} 60 \\ \times\ 16 \\ \hline \end{array}$

8. $\begin{array}{r} 47 \\ \times\ 32 \\ \hline \end{array}$

9. $\begin{array}{r} 79 \\ \times\ 53 \\ \hline \end{array}$

PRACTICE TEST



1. 5 X 500 = _____
2. 6 X 7,000 = _____
3. 2 X 80 = _____
4. 3 X 1,200 = _____
5. 4 X 600 = _____
6. 8 X 70 = _____
7. 9 X 4,000 = _____
8. 11 X 1,300 = _____

9. 63 X 7 = _____

10. 4 X 89 = _____

11. 92 X 3 = _____

12.
$$\begin{array}{r} 24 \\ \times\ 67 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 53 \\ \times\ 18 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 46 \\ \times\ 50 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 89 \\ \times\ 44 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 17 \\ \times\ 62 \\ \hline \end{array}$$

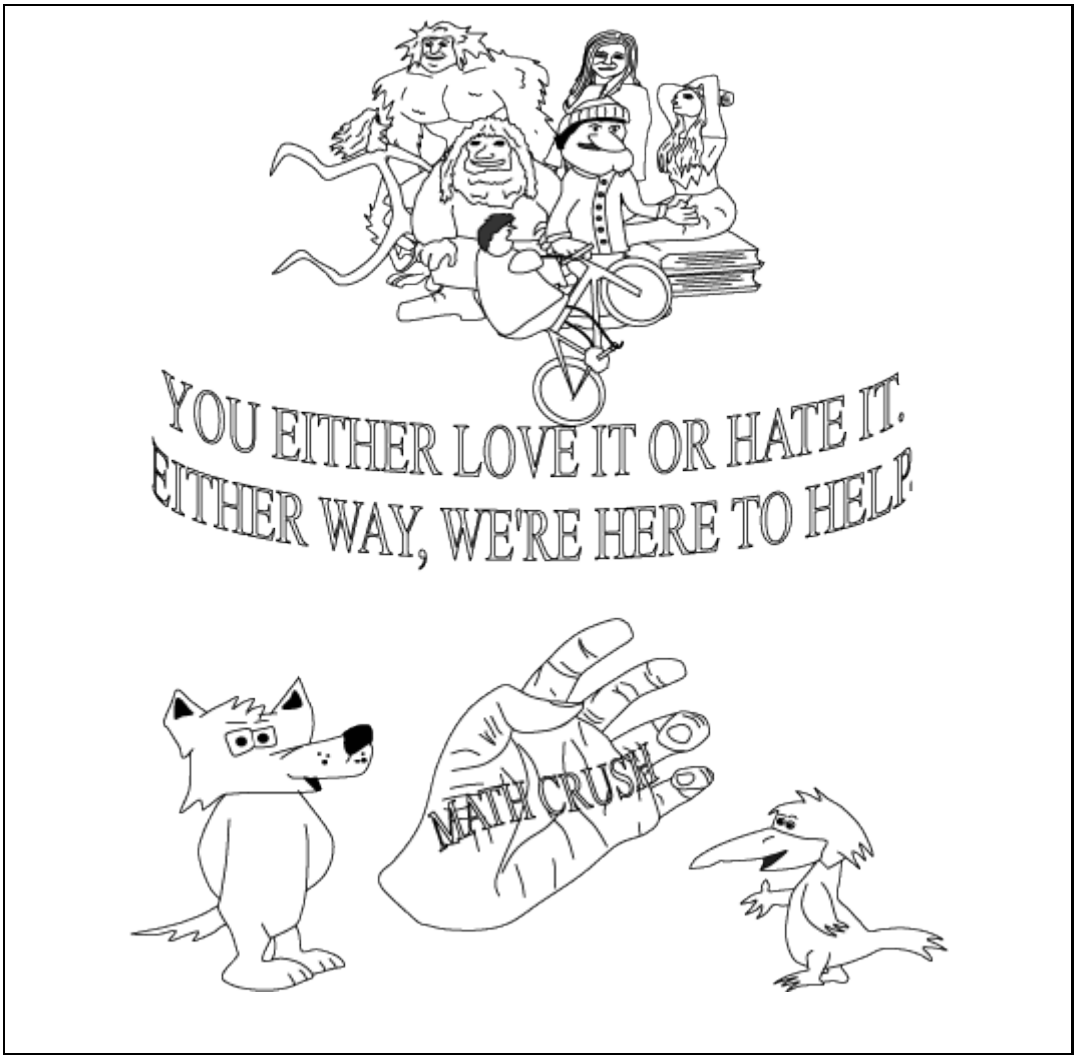
17.
$$\begin{array}{r} 98 \\ \times\ 89 \\ \hline \end{array}$$

YOUR SCORE: _____OUT OF 17 HOW YOU DID: 14-17 = ✍ / 12-13 = 😀 / 11 OR LESS = ?

EXTRA PRACTICE - D

MULTIPLYING BY TWO DIGITS

1. 46 x 36	2. 71 x 17	3. 89 x 51	4. 35 x 42
5. 34 x 28	6. 44 x 63	7. 58 x 27	8. 82 x 14
9. 79 x 14	10. 30 x 33	11. 61 x 23	12. 23 x 54
13. 56 x 21	14. 16 x 47	15. 92 x 38	16. 35 x 26
17. 70 x 11	18. 65 x 30	19. 74 x 59	20. 93 x 68


YOU EITHER LOVE IT OR HATE IT.
EITHER WAY, WE'RE HERE TO HELP.
MATH CRUSH