Multiplication and Division Strategies

A Little Bit More/A Little Bit Less

I can solve multiplication problems by taking some off or putting some on (Compensation)

Exercise 1
What to do
Use the information given to you to derive the answer to a similar problem.

1) If $9 \times 20 = 180$ what is $9 \times 21$ ?
2) If $8 \times 30 = 240$ what is $8 \times 31$ ?
3) If $4 \times 40 = 160$ what is $4 \times 42$ ?
4) If $5 \times 50 = 250$ what is $5 \times 51$ ?
5) If $3 \times 60 = 180$ what is $3 \times 62$ ?
6) If $2 \times 70 = 140$ what is $2 \times 73$ ?
7) If $4 \times 80 = 320$ what is $4 \times 82$ ?
8) If $2 \times 90 = 180$ what is $2 \times 94$ ?

Exercise 2
What to do
Use the information given to you to derive the answer to a similar problem.

1) If $9 \times 20 = 180$ what is $9 \times 19$ ?
2) If $8 \times 30 = 240$ what is $8 \times 29$ ?
3) If $7 \times 40 = 280$ what is $7 \times 39$ ?
4) If $5 \times 50 = 250$ what is $5 \times 49$?

5) If $3 \times 60 = 180$ what is $3 \times 58$?

6) If $2 \times 70 = 140$ what is $2 \times 67$?

7) If $4 \times 80 = 320$ what is $4 \times 78$?

8) If $2 \times 90 = 180$ what is $2 \times 86$?

**Exercise 3**

*What to do*

*Use the information given to you to derive the answer to a similar problem.*

1) If $9 \times 20 = 180$ what is $9 \times 22$?

2) If $7 \times 30 = 210$ what is $7 \times 32$?

3) If $5 \times 40 = 200$ what is $5 \times 43$?

4) If $4 \times 50 = 200$ what is $4 \times 51$?

5) If $3 \times 60 = 180$ what is $3 \times 61$?

6) If $6 \times 70 = 420$ what is $6 \times 73$?

7) If $6 \times 80 = 480$ what is $6 \times 81$?

8) If $8 \times 90 = 720$ what is $8 \times 92$?

**Exercise 4**

*What to do*

*Use the information given to you to derive the answer to a similar problem.*

1) If $9 \times 20 = 180$ what is $9 \times 18$?

2) If $7 \times 40 = 280$ what is $7 \times 37$?

3) If $5 \times 40 = 200$ what is $5 \times 38$?
4) If $4 \times 50 = 200$ what is $4 \times 47$ ?

5) If $3 \times 60 = 180$ what is $3 \times 56$ ?

6) If $6 \times 70 = 420$ what is $6 \times 67$ ?

7) If $6 \times 80 = 480$ what is $6 \times 78$ ?

8) If $8 \times 90 = 720$ what is $8 \times 88$ ?

**Exercise 5**

*What to do*

Use the information given to you to derive the answer to a similar problem.

1) If $4 \times 200 = 800$ what is $4 \times 201$ ?

2) If $7 \times 300 = 2100$ what is $7 \times 301$ ?

3) If $8 \times 400 = 3200$ what is $8 \times 402$ ?

4) If $9 \times 500 = 4500$ what is $9 \times 501$ ?

5) If $5 \times 600 = 3000$ what is $5 \times 602$ ?

6) If $3 \times 700 = 2100$ what is $3 \times 704$ ?

7) If $2 \times 800 = 1600$ what is $2 \times 803$ ?

8) If $6 \times 900 = 5400$ what is $6 \times 903$ ?

**Exercise 6**

*What to do*

Use the information given to you to derive the answer to a similar problem.

1) If $4 \times 200 = 800$ what is $4 \times 199$ ?

2) If $7 \times 300 = 2100$ what is $7 \times 299$ ?

3) If $8 \times 400 = 3200$ what is $8 \times 398$ ?
4) If $9 \times 500 = 4500$ what is $9 \times 498$?

5) If $5 \times 600 = 3000$ what is $5 \times 597$?

6) If $3 \times 700 = 2100$ what is $3 \times 698$?

7) If $2 \times 800 = 1600$ what is $2 \times 797$?

8) If $6 \times 900 = 5400$ what is $6 \times 897$?

Exercise 7
What to do
Use the information given to you to derive the answer to a similar problem.

1) If $2 \times 25 = 50$ what is $2 \times 24$?

2) If $4 \times 25 = 100$ what is $4 \times 27$?

3) If $3 \times 15 = 45$ what is $3 \times 14$?

4) If $4 \times 15 = 60$ what is $4 \times 17$?

5) If $6 \times 15 = 90$ what is $6 \times 14$?

6) If $2 \times 25 = 50$ what is $2 \times 26$?

7) If $4 \times 25 = 100$ what is $4 \times 24$?

8) If $3 \times 15 = 45$ what is $3 \times 16$?

9) If $4 \times 15 = 60$ what is $4 \times 13$?

10) If $6 \times 15 = 90$ what is $6 \times 17$?

Exercise 8
What to do
Use the strategy add a little/subtract a little to solve these problems.

Julie wanted to find $3 \times 28$. 
She knows that 28 is near 30, so she used $3 \times 30 = 90$ and subtracted $3 \times 2 = 6$ to get the answer.

Julie recorded this in her maths book

$3 \times 28 = 90 - 6 = 84$

Using Julie’s method find the answer to the following problems. Record your working like Julie did.

1) $4 \times 19$ (2) $3 \times 41$ (3) $5 \times 59$
4) $7 \times 52$ (5) $4 \times 73$ (6) $3 \times 37$
7) $6 \times 102$ (8) $5 \times 301$ (9) $4 \times 698$
10) $3 \times 499$ (11) $7 \times 602$ (12) $9 \times 3999$

**Exercise 9**

What to do

Use the strategy add a little/subtract a little to make up five problems of your own. Give the answers, recording like in Julie's method.
A Little Bit More/A Little Bit Less
Answers

Exercise 1
1) 189  (2) 248  (3) 168  (4) 255
5) 186  (6) 146  (7) 328  (8) 188

Exercise 2
1) 171  (2) 232  (3) 273  (4) 245
5) 174  (6) 134  (7) 312  (8) 172

Exercise 3
1) 198  (2) 224  (3) 215  (4) 204
5) 183  (6) 438  (7) 486  (8) 736

Exercise 4
1) 162  (2) 259  (3) 190  (4) 188
5) 168  (6) 402  (7) 468  (8) 704

Exercise 5
1) 804  (2) 2107  (3) 3216  (4) 4509
5) 3010  (6) 2112  (7) 1606  (8) 5418

Exercise 6
1) 796  (2) 2093  (3) 3184  (4) 4482
5) 2985  (6) 2094  (7) 1594  (8) 5382

Exercise 7
1) 48  (2) 108  (3) 42  (4) 68
5) 84  (6) 52  (7) 96  (8) 48
9) 52

Exercise 8
1) $80 - 4 = 76$  (2) $120 + 3 = 123$  (3) $300 - 5 = 295$
4) $350 + 14 = 364$  (5) $280 + 12 = 292$  (6) $120 - 9 = 111$
7) $600 + 12 = 612$  (8) $1500 + 5 = 1505$  (9) $2800 - 8 = 2792$
10) $1500 - 3 = 1497$  (11) $4200 + 14 = 4214$  (12) $36000 - 9 = 35991$

Exercise 9
Answers will vary.