

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)

AC

EA

AA

AM

AP

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

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 9×19 ?
- 2) If $8 \times 30 = 240$ what is 8×29 ?
- 3) If $7 \times 40 = 280$ what is 7×39 ?

- 4) If $5 \times 50 = 250$ what is 5×49 ?
- 5) If $3 \times 60 = 180$ what is 3×58 ?
- 6) If $2 \times 70 = 140$ what is 2×67 ?
- 7) If $4 \times 80 = 320$ what is 4×78 ?
- 8) If $2 \times 90 = 180$ what is 2×86 ?

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 9×22 ?
- 2) If $7 \times 30 = 210$ what is 7×32 ?
- 3) If $5 \times 40 = 200$ what is 5×43 ?
- 4) If $4 \times 50 = 200$ what is 4×51 ?
- 5) If $3 \times 60 = 180$ what is 3×61 ?
- 6) If $6 \times 70 = 420$ what is 6×73 ?
- 7) If $6 \times 80 = 480$ what is 6×81 ?
- 8) If $8 \times 90 = 720$ what is 8×92 ?

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 9×18 ?
- 2) If $7 \times 40 = 280$ what is 7×37 ?
- 3) If $5 \times 40 = 200$ what is 5×38 ?

- 4) If $4 \times 50 = 200$ what is 4×47 ?
- 5) If $3 \times 60 = 180$ what is 3×56 ?
- 6) If $6 \times 70 = 420$ what is 6×67 ?
- 7) If $6 \times 80 = 480$ what is 6×78 ?
- 8) If $8 \times 90 = 720$ what is 8×88 ?

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 4×201 ?
- 2) If $7 \times 300 = 2100$ what is 7×301 ?
- 3) If $8 \times 400 = 3200$ what is 8×402 ?
- 4) If $9 \times 500 = 4500$ what is 9×501 ?
- 5) If $5 \times 600 = 3000$ what is 5×602 ?
- 6) If $3 \times 700 = 2100$ what is 3×704 ?
- 7) If $2 \times 800 = 1600$ what is 2×803 ?
- 8) If $6 \times 900 = 5400$ what is 6×903 ?

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 4×199 ?
- 2) If $7 \times 300 = 2100$ what is 7×299 ?
- 3) If $8 \times 400 = 3200$ what is 8×398 ?

- 4) If $9 \times 500 = 4500$ what is 9×498 ?
- 5) If $5 \times 600 = 3000$ what is 5×597 ?
- 6) If $3 \times 700 = 2100$ what is 3×698 ?
- 7) If $2 \times 800 = 1600$ what is 2×797 ?
- 8) If $6 \times 900 = 5400$ what is 6×897 ?

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 2×24 ?
- 2) If $4 \times 25 = 100$ what is 4×27 ?
- 3) If $3 \times 15 = 45$ what is 3×14 ?
- 4) If $4 \times 15 = 60$ what is 4×17 ?
- 5) If $6 \times 15 = 90$ what is 6×14 ?
- 6) If $2 \times 25 = 50$ what is 2×26 ?
- 7) If $4 \times 25 = 100$ what is 4×24 ?
- 8) If $3 \times 15 = 45$ what is 3×16 ?
- 9) If $4 \times 15 = 60$ what is 4×13 ?
- 10) If $6 \times 15 = 90$ what is 6×17 ?

Exercise 8

What to do

Use the strategy add a little/subtract a little to solve these problems.

Julie wanted to find 3×28 .

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.

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

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

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

Exercise 2

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

Exercise 3

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

Exercise 4

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

Exercise 5

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

Exercise 6

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

Exercise 7

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|-------|----------|--------|--------|
| 1) 48 | (2) 108 | (3) 42 | (4) 68 |
| 5) 84 | (6) 52 | (7) 96 | (8) 48 |
| 9) 52 | (10) 102 | | |

Exercise 8

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|-----------------------|-------------------------|--------------------------|
| 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.