A A TOOL FOR FAST MULTIPLICATION

A.1 CALCULATING USING THE TIMES TABLE

$$7 \times 0 = 0$$

$$7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

Ex 1: Given the times table of
$$7 \times 5 = 35$$
,

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$7 \times 8 = 56$$

$$7 \times 9 = 63$$

$$7 \times 10 = 70$$

calculate
$$7 \times 6 =$$

$$4 \times 0 = 0$$

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$4 \times 4 = 16$$

Ex 2: Given the times table of
$$4 \times 5 = 20$$
,

$$4 \times 6 = 24$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$4 \times 9 = 36$$

$$4 \times 10 = 40$$

calculate
$$4 \times 9 =$$

$$8 \times 0 = 0$$

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

Ex 3: Given the times table of 8
$$8 \times 5 = 40$$
,

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

calculate
$$8 \times 7 =$$

$$4 \times 0 = 0$$

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$4 \times 4 = 16$$

Ex 4: Given the times table of
$$4 \times 5 = 20$$
,

$$4 \times 6 = 24$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$4 \times 9 = 36$$

$$4 \times 10 = 40$$

B REVIEWING OUR FIRST TIMES TABLES

B.1 MULTIPLYING BY 2 3 4 5 10

Ex 5:
$$2 \times 3 = \boxed{}$$

Ex 6:
$$3 \times 8 =$$

Ex 7:
$$5 \times 8 =$$

Ex 8:
$$4 \times 4 =$$

Ex 9:
$$10 \times 2 =$$

Ex 10:
$$3 \times 5 =$$

Ex 11:
$$4 \times 7 =$$

Ex 12:
$$5 \times 1 =$$

Ex 13:
$$3 \times 7 =$$

Ex 14:
$$2 \times 8 =$$

Ex 15:
$$10 \times 8 =$$

Ex 16:
$$4 \times 6 =$$

Ex 17:
$$2 \times 7 =$$

Ex 18:
$$5 \times 7 =$$

C THE 6S TIMES TABLE

C.1 COUNTING BY 6S

Ex 19:

$$1 \times 6 =$$

Ex 20:

$$2 \times 6 =$$

Ex 21:

$$3 \times 6 =$$

Ex 22:

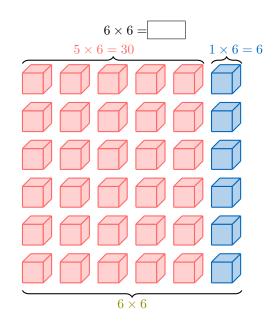
 $4 \times 6 =$

Ex 23:

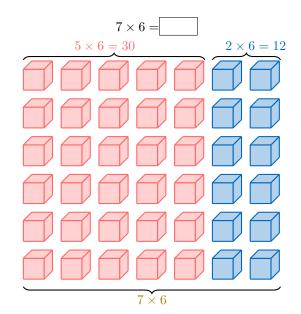
 $5 \times 6 =$

C.2 MULTIPLYING BY 6 USING DECOMPOSITION

Ex 24:

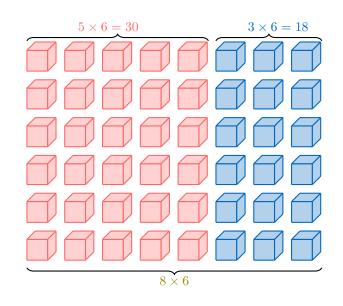


Ex 25:

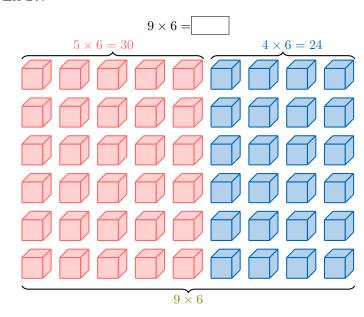


Ex 26:

 $8 \times 6 =$



Ex 27:



C.3 MULTIPLYING BY 6

Ex 28:

 $6 \times 0 =$

Ex 29:

 $6 \times 1 =$

Ex 30:

 $6 \times 2 =$

Ex 31:

 $6 \times 3 =$

Ex 32:

 $6 \times 4 =$

Ex 33:



Ex 34:

$$6 \times 6 =$$

Ex 35:

$$6 \times 7 =$$

Ex 36:

Ex 37:

$$6 \times 9 =$$

Ex 38:

$$6 \times 10 =$$

D THE 7S TIMES TABLE

D.1 COUNTING BY 7S

Ex 39:

$$2 \times 7 =$$

Ex 40:

$$3 \times 7 =$$

Ex 41:

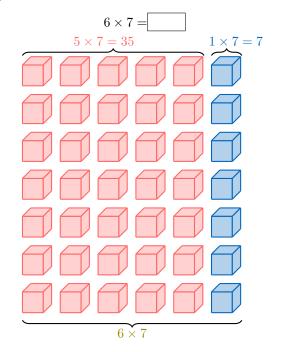
$$4 \times 7 =$$

Ex 42:

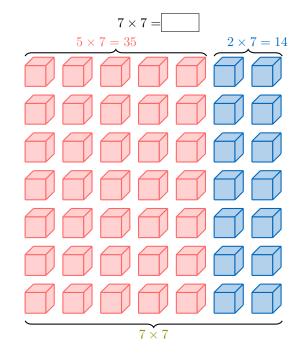
$$5 \times 7 =$$

D.2 MULTIPLYING BY 7 USING DECOMPOSITION

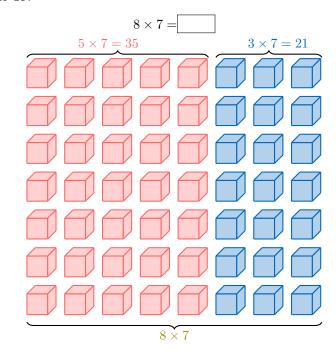
Ex 43:







Ex 45:



D.3 MULTIPLYING BY 7

Ex 46:

$$7 \times 0 =$$

Ex 47:

Ex 48:

Ex 49:

$$7 \times 3 =$$

Ex 50:

7 × 4 =

Ex 51:

7 × 5 =

Ex 52:

 $7 \times 6 =$

Ex 53:

 $7 \times 7 =$

Ex 54:

7 × 8 =

Ex 55:

 $7 \times 9 =$

Ex 56:

7 × 10 =

E THE 8S TIMES TABLE

E.1 COUNTING BY 8S

Ex 57:

 $2 \times 8 =$

Ex 58:

 $3 \times 8 =$

Ex 59:

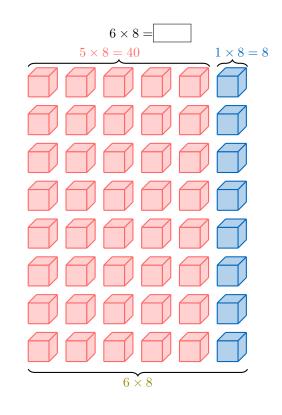
 $4 \times 8 =$

Ex 60:

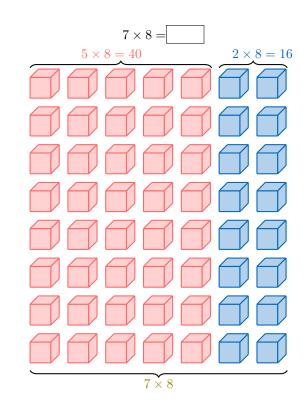
 $5 \times 8 =$

E.2 MULTIPLYING BY 8 USING DECOMPOSITION

Ex 61:

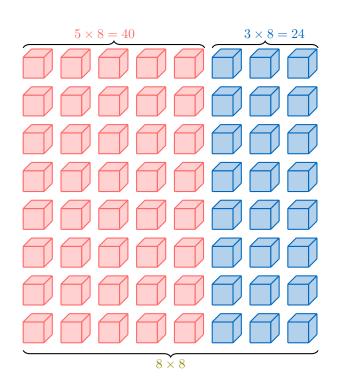


Ex 62:



Ex 63:

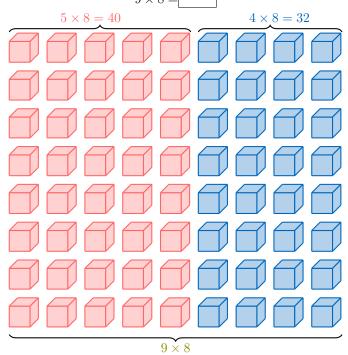
8 × 8 =





- Ex 69:
- $8 \times 5 =$
- Ex 70:
- $8 \times 4 =$
- Ex 71:
- $8 \times 7 =$
- Ex 72:
- $8 \times 6 =$

- Ex 64:
- $9 \times 8 =$
- Ex 73:
- $8 \times 8 =$
- Ex 74:
- $8 \times 9 =$
- Ex 75:
- $8 \times 10 =$



F THE 9S TIMES TABLE

F.1 COUNTING BY 9S

Ex 76:

Ex 77:

Ex 78:

 $2 \times 9 =$

E.3 MULTIPLYING BY 8

Ex 65: $8 \times 0 =$

Ex 66:

 $8 \times 2 =$

 $4 \times 9 =$

 $3 \times 9 =$

Ex 67:

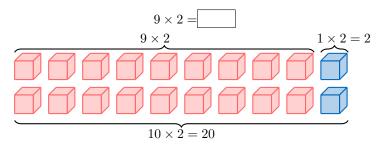
 $8 \times 1 =$

Ex 79:

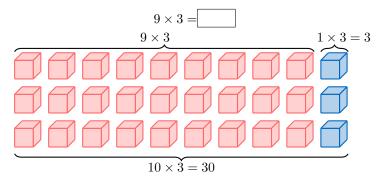
 $5 \times 9 =$

F.2 MULTIPLYING BY 9 USING DECOMPOSITION

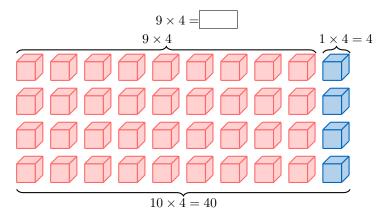
Ex 80:



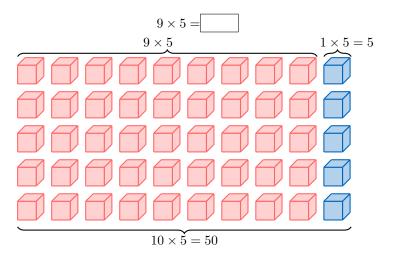
Ex 81:



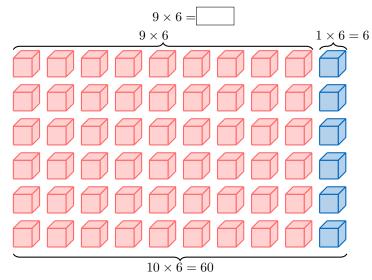
Ex 82:



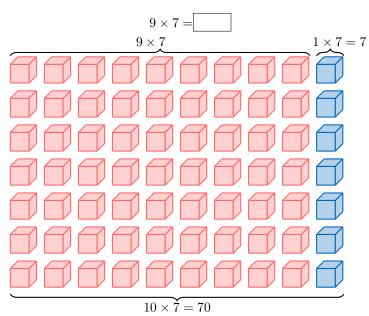
Ex 83:



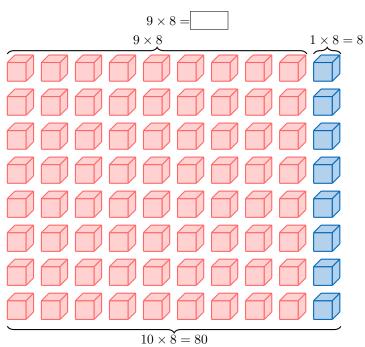
Ex 84:



Ex 85:

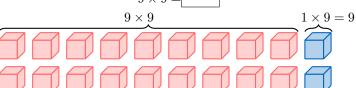


Ex 86:



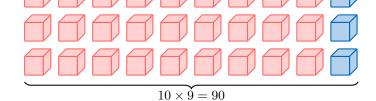
Ex 87:











F.3 MULTIPLYING BY 9

Ex 88:

 $9 \times 0 =$

Ex 89:

 $9 \times 1 =$

Ex 90:

 $9 \times 2 =$

Ex 91:

 $9 \times 4 =$

Ex 92:

 $9 \times 6 =$

Ex 93:

 $9 \times 3 =$

Ex 94:

Ex 95:

 $9 \times 7 =$

Ex 96:

 $9 \times 10 =$

Ex 97:

 $9\times8=$

Ex 98:

 $9 \times 9 =$

G THE FULL MULTIPLICATION GRID

G.1 MULTIPLYING BY 1 TO 10

Ex 99:

 $6 \times 4 =$

Ex 100:

 $9 \times 3 =$

Ex 101:

 $8 \times 7 =$

Ex 102:

 $5 \times 7 =$

Ex 103:

 $8 \times 6 =$

Ex 104:

 $6 \times 9 =$