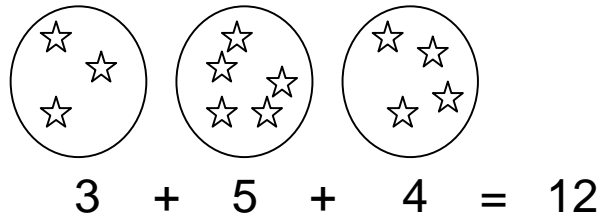
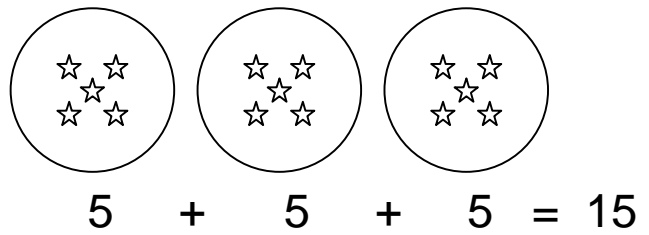


Mat 1 – Display Sheet

Unlike Groups:



Like Groups:



Number of Groups

Number in Each Group

Total (in all)

3

5

a. \_\_\_\_\_

2

6

b. \_\_\_\_\_

3

4

c. \_\_\_\_\_

1

9

d. \_\_\_\_\_

2

0

e. \_\_\_\_\_

0

7

f. \_\_\_\_\_

5

1

g. \_\_\_\_\_

1

8

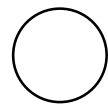
h. \_\_\_\_\_

**Mat 2 - Multiplication Mat**

---

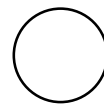
Number of Groups

\_\_\_\_\_



Number in Each Group

\_\_\_\_\_



Total (in all)

\_\_\_\_\_

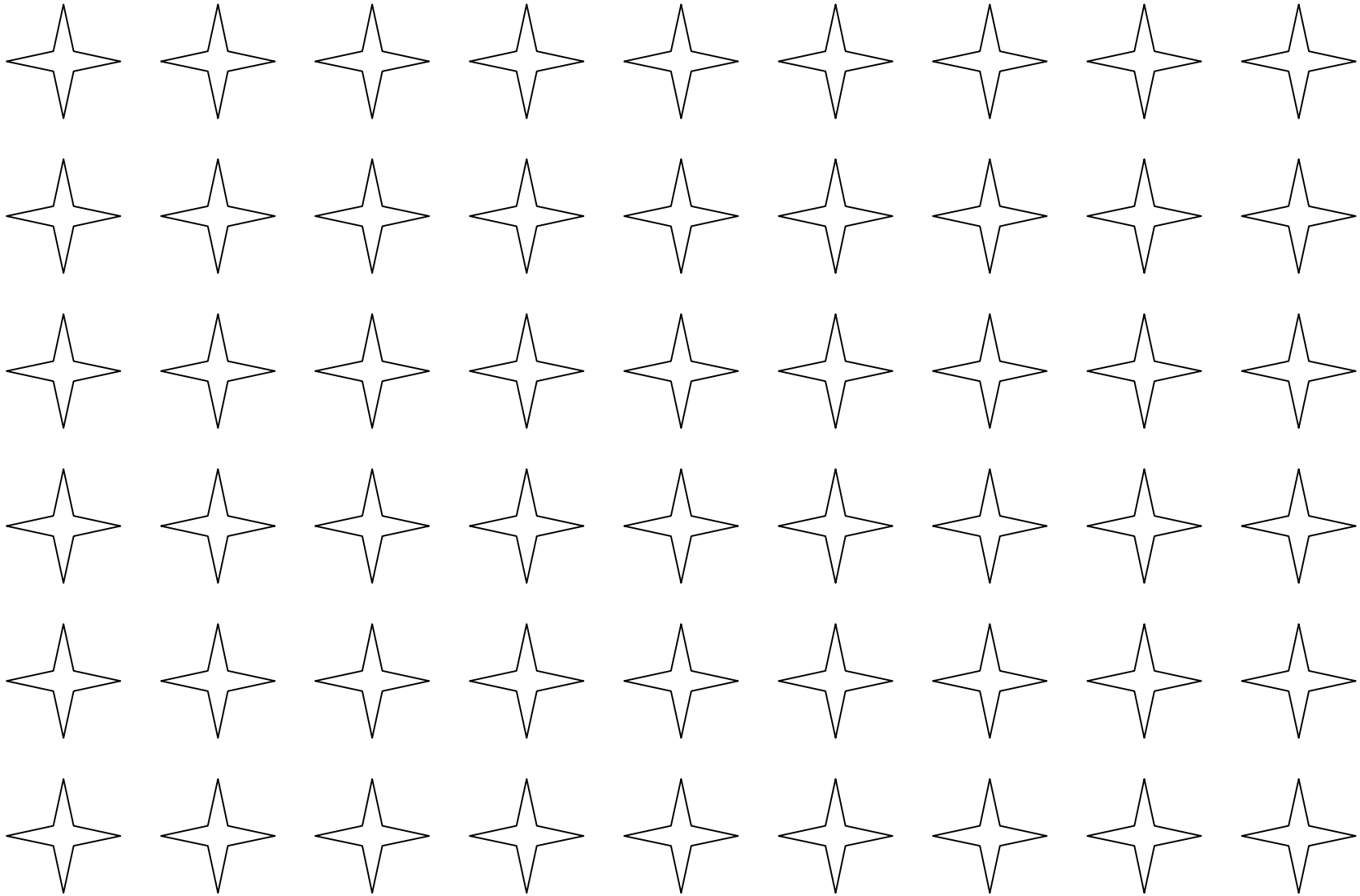
Mat 3 - Multiplication Array Sheet

<u>Number of Rows</u>	<u>Number in Each Row</u>	<u>Total</u>	<u>Rows</u>		<u>Number in Each Row</u>		<u>In All</u>
3	6	_____	( _____	X	_____	=	_____)
2	8	_____	( _____	X	_____	=	_____)
1	9	_____	( _____	X	_____	=	_____)
4	5	_____	( _____	X	_____	=	_____)
5	4	_____	( _____	X	_____	=	_____)

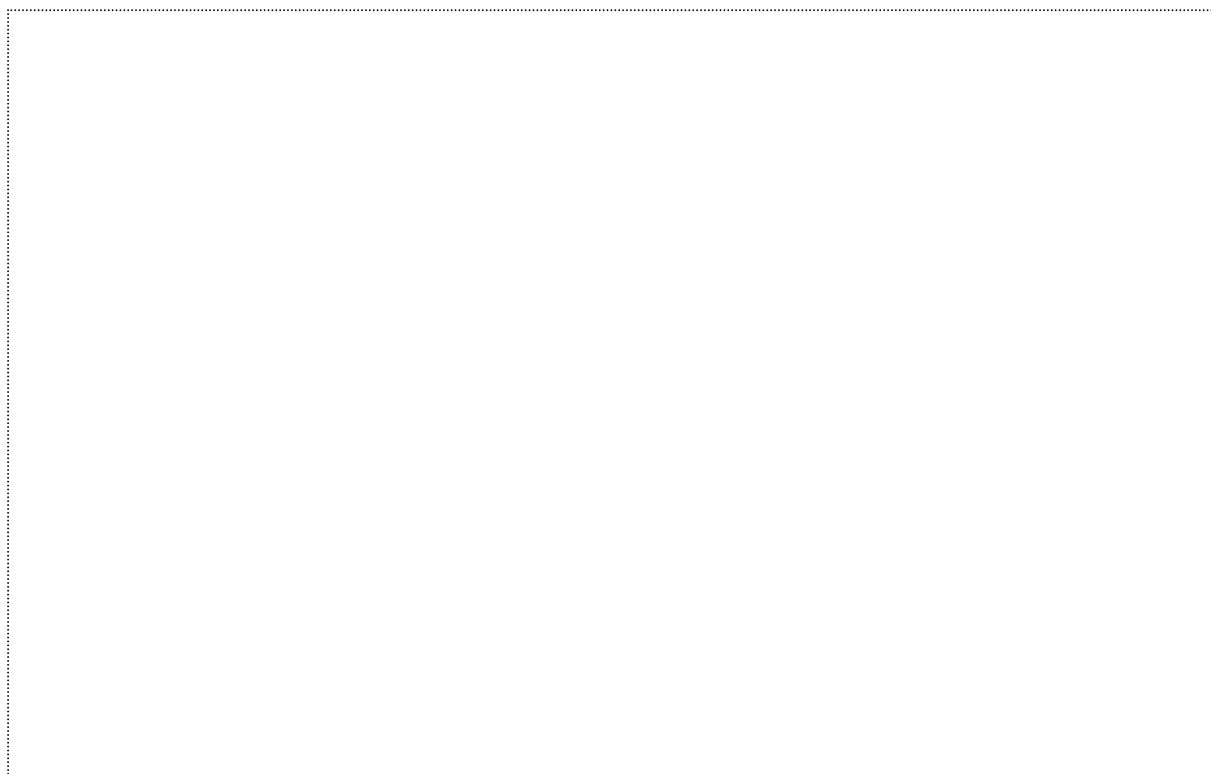
**Mat 4 - Multiplication Array Mat**

	Number of Rows	Number in Each Row	Total (in all)	
1.	_____	_____	_____	_____ X _____ = _____
2.	_____	_____	_____	_____ X _____ = _____

**Mat 5 – Star Array**



**Mat 6 – L-Sheet (cut on dotted line)**



Mat 7 - Multiplication Recording Sheet

_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>
_____	X	_____	=	<input type="text"/>

**Mat 8 - Division Mat**

---

Total (in all)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Mat 9 - Division Array Mat

1. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_

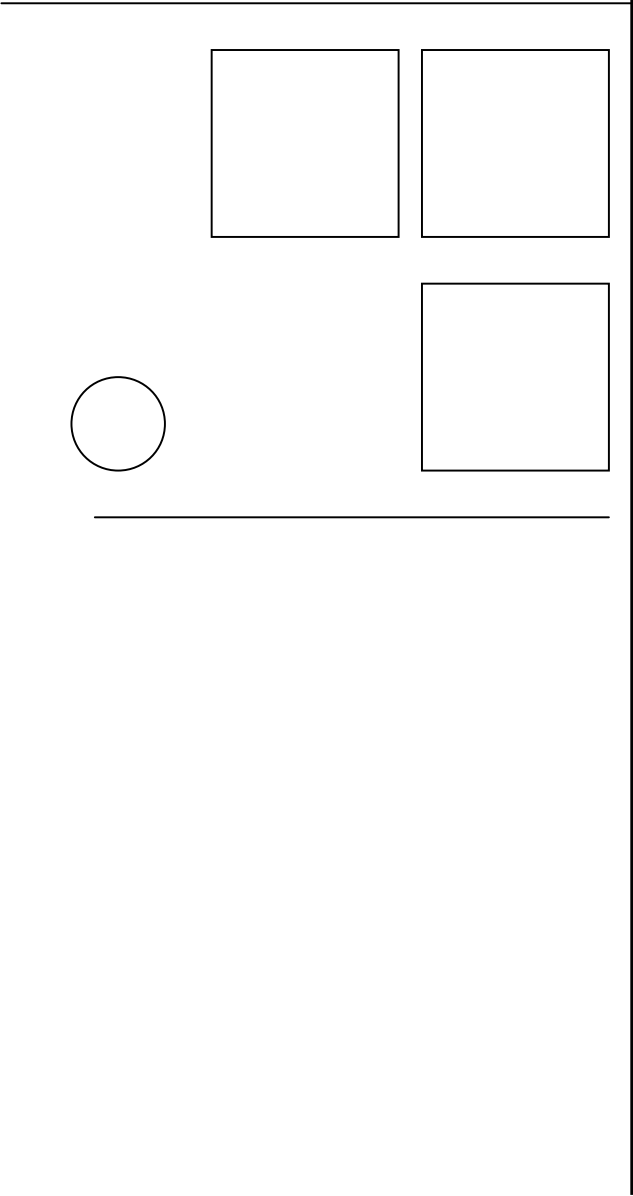
Mat 10 - Division Array Sheet

<u>Total (in all)</u>	<u>Number of Rows</u>	<u>Number in Each Row</u>					
18	3	_____	(18	÷	_____	=	_____)
16	2	_____	(16	÷	_____	=	_____)
24	6	_____	(24	÷	_____	=	_____)
21	3	_____	(21	÷	_____	=	_____)
15	_____	5	(15	÷	_____	=	_____)
27	_____	9	(27	÷	_____	=	_____)
14	_____	7	(14	÷	_____	=	_____)

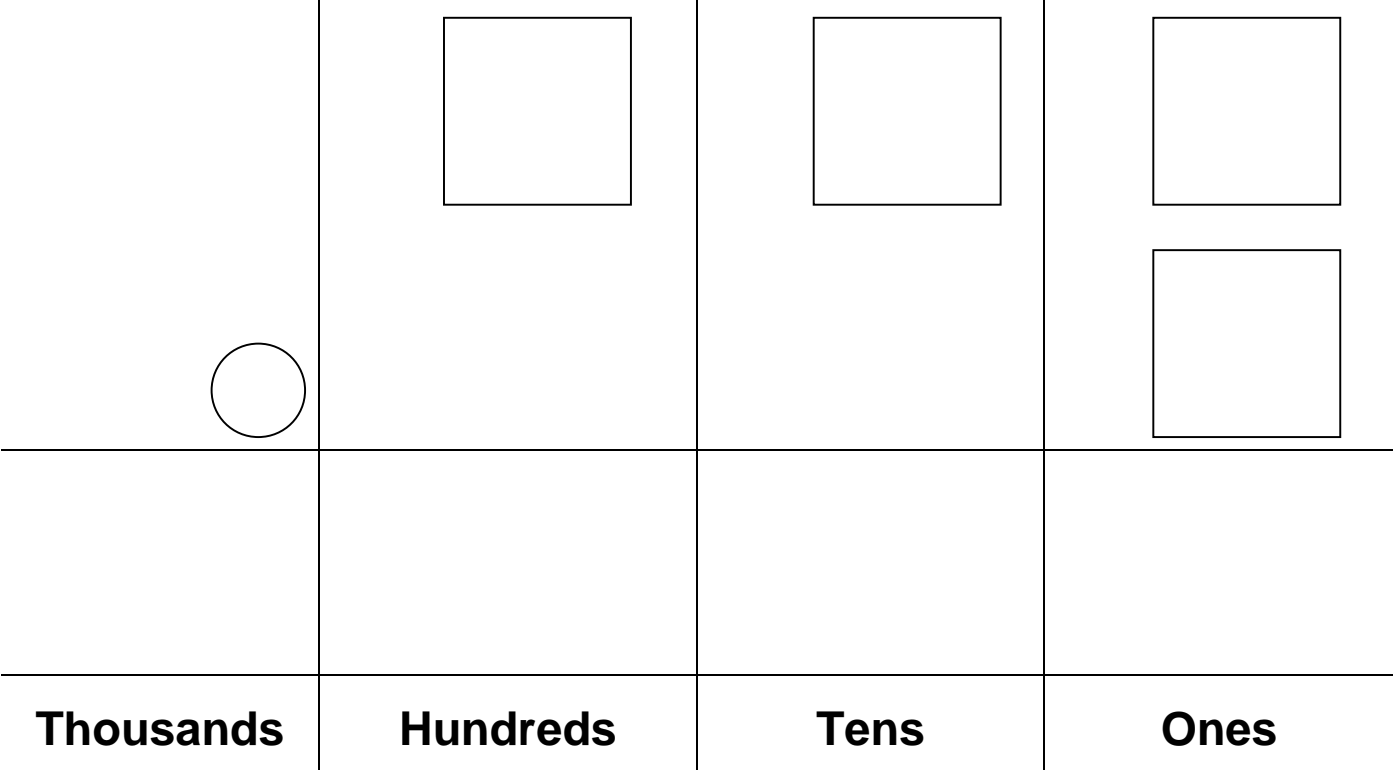
Mat 11 - Division Recording Sheet

_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		
_____	÷	_____		

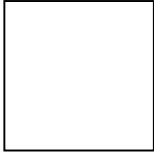
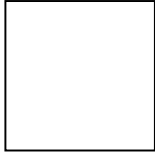
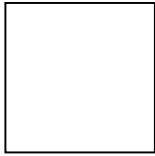


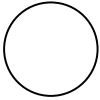
**Mat 12 - Two-digit Multiplication Mat**







**Mat 13 - Blank Multiplication Map**



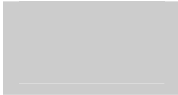
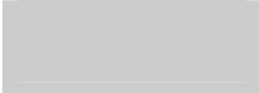
**Mat 14 - Blank 2-digit Multiplication Sheet**

			 	 	
					By ones
					By tens
<b>Ten Thousands</b>	<b>Thousands</b>	<b>Hundreds</b>	<b>Tens</b>	<b>Ones</b>	

	by ones	by tens	by both	
	16	16	16	16
	<u>X 14</u>	<u>X 4</u>	<u>X 10</u>	<u>X 14</u>
				_____ by ones
				+ _____ by tens
				

	by ones	by tens	by both	
	24	24	24	24
	<u>X 32</u>	<u>X 2</u>	<u>X 30</u>	<u>X 32</u>
				_____ by ones
				+ _____ by tens
				

by ones    by tens    by both

<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
				by ones
			+	by tens
				



MD6 Practice - Multiplication Problem Worksheet

$$\begin{array}{r} 123 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 321 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 502 \\ \times 3 \\ \hline \end{array}$$

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

Mat 16 - Division Symbols

$$18 \div 3 =$$

$$3 \overline{)18}$$

$$16 \div 2 =$$

$$2 \overline{)16}$$

Mat 17 - Division Language A

	Six divided by three	$3 \overline{)6}$	$6 \div 3 =$	$\frac{6}{3}$
--	----------------------	-------------------	--------------	---------------

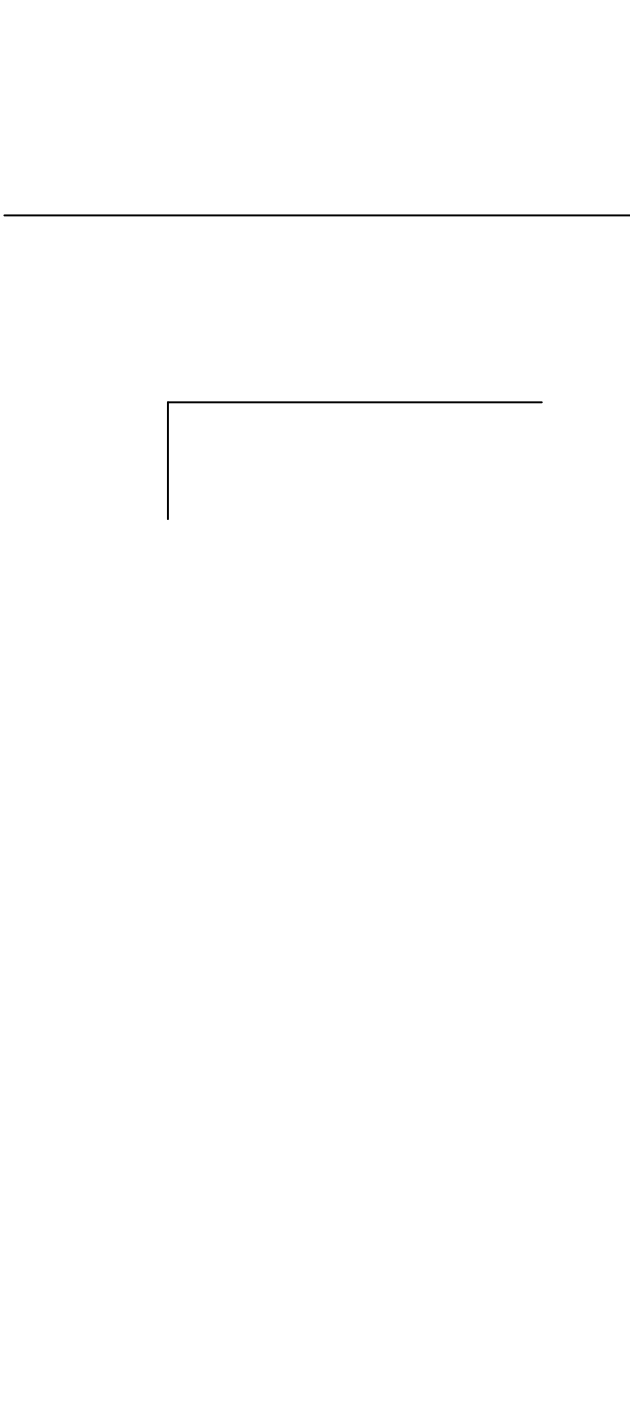
a.	How many threes in 15?			
b.	7 goes into 56			
c.	320 divided by 15			
d.	21 divided into 7 equal groups			

Mat 18 - Division Language B

	Six divided by three	$3 \overline{)6}$	$6 \div 3 =$	$\frac{6}{3}$
--	----------------------	-------------------	--------------	---------------

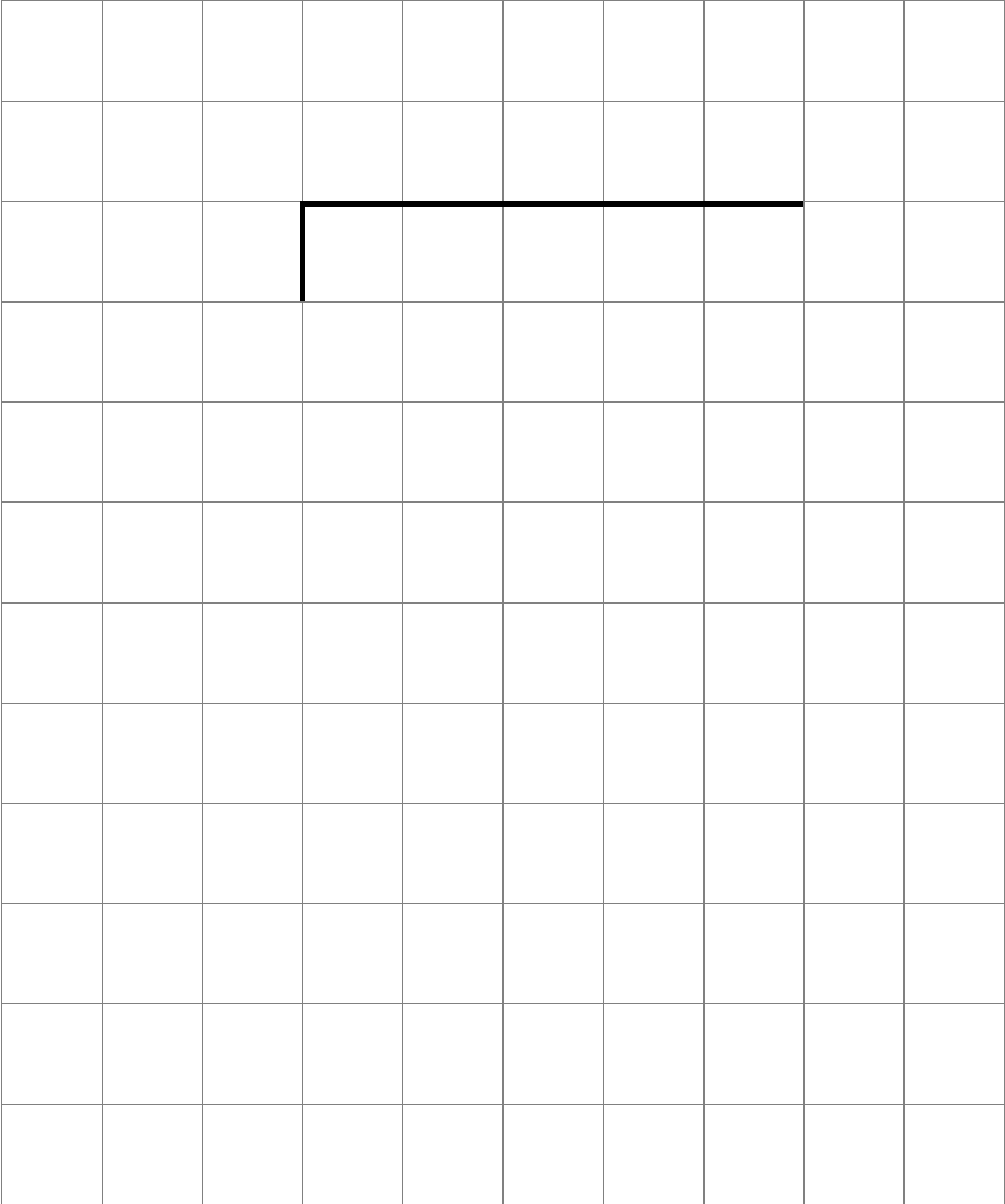
a.	How many _____ in _____?			
b.	_____ goes into _____			
c.	_____ divided by _____			
d.	_____ divided into _____ equal groups			

**Mat 19 – Blank Division Mat**



**Mat 20 - 1-digit Divisor Sheet with Lines**


A 4x10 grid for division. The grid is divided into four horizontal sections by three dotted lines. Each section has a horizontal line on the left side. The top-left cell is empty. The second cell in the first row has a downward-pointing arrow. The third cell in the first row has a longer downward-pointing arrow.



Mat 22 - Zeros and Ones

$1 \times 7 = \underline{\quad}$

$7 \times 1 = \underline{\quad}$

$1 \times 9 = \underline{\quad}$

$9 \times 1 = \underline{\quad}$

$1 \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times 1 = \underline{\quad}$

$$\begin{array}{r} 0 \\ \times 4 \\ \hline \end{array}$$

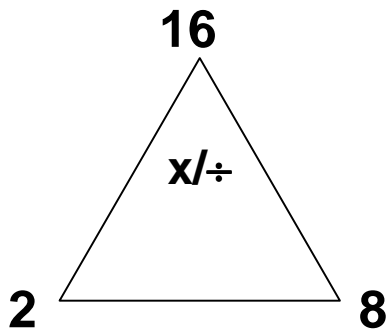
$$\begin{array}{r} 0 \\ \times \underline{\quad} \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} \times \underline{\quad} \\ \hline 0 \end{array}$$



Mat 23 – Fact Families (x/÷)

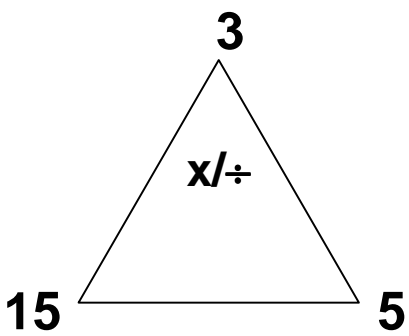


$$\underline{\quad} \times \underline{\quad} = 16$$

$$16 \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = 16$$

$$16 \div \underline{\quad} = \underline{\quad}$$

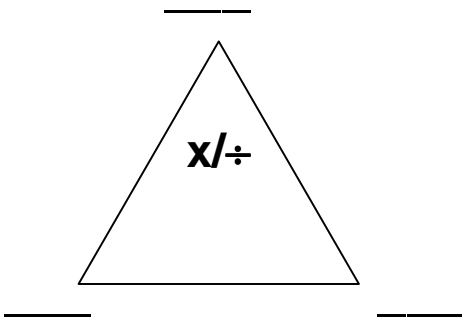


$$\underline{\quad} \times \underline{\quad} = 15$$

$$15 \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = 15$$

$$15 \div \underline{\quad} = \underline{\quad}$$

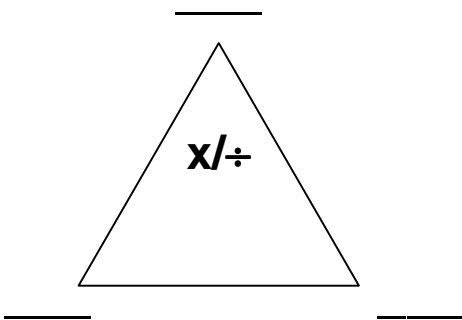


$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$



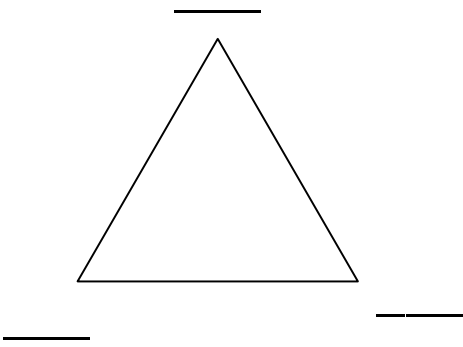
$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

Mat 24 – Blank Fact Family Sheet

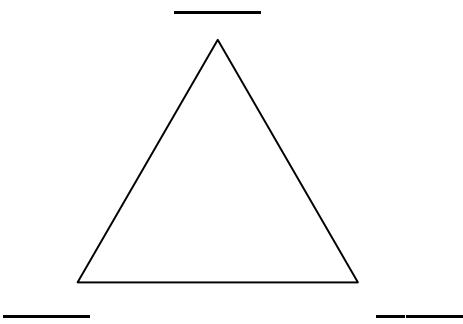


\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

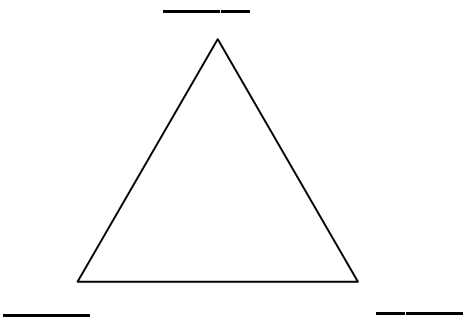


\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

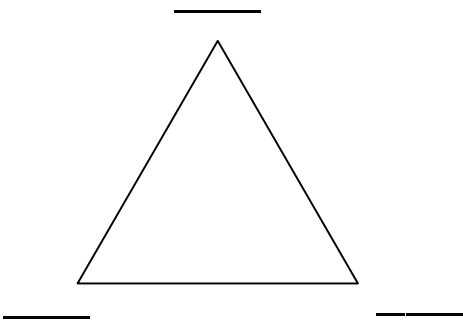


\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ = \_\_\_\_  
\_\_\_\_ = \_\_\_\_

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

**0**

**10**

$$6 \times 4 = ?$$

Try:

1. Use turn-around facts.

$$4 \times 6 = \underline{\quad}$$

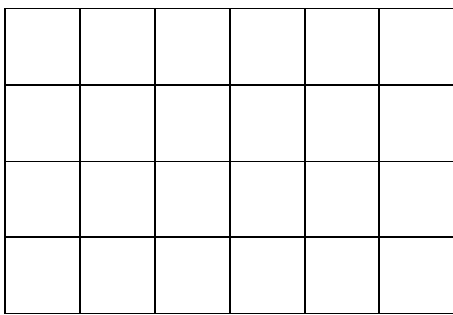
2. Add.

$$4 \text{ sixes is } 6 + 6 + 6 + 6$$

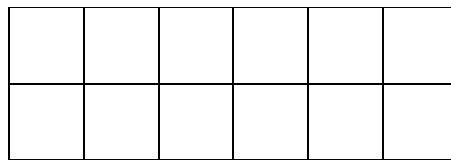
3. Use what you know.

$$2 \text{ sixes} + 2 \text{ sixes } (12 + 12)$$

Mat 28 - Using Smaller Arrays



$$2 \times 6 = 12$$



$$2 \times 6 = 12$$

---

$$4 \times 6 = 24$$

$$24 \div 8 = ?$$

Try:

1. Use multiplication.

$$8 \times \underline{\quad} = 24$$

2. Subtract.

Start with 24. Take out groups of 8. Count the groups.  $24 - \underline{8} - \underline{8} - \underline{8}$

3. Use what you know.

2 eights is 16. One more eight makes 24. That's 3 eights.

**Mat 30 - Products of 9 (with answers)**

$$9 \times 0 = 0$$

$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$



Mat 31 - Products of 9 (without answers)

$9 \times 0 = \underline{\quad}$

$9 \times 1 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$9 \times 3 = \underline{\quad}$

$9 \times 4 = \underline{\quad}$

$9 \times 5 = \underline{\quad}$

$9 \times 6 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$9 \times 8 = \underline{\quad}$

$9 \times 9 = \underline{\quad}$

$9 \times 10 = \underline{\quad}$

**Mat 32 – Multiplication Chart (3 pages)**

<b>X</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>1</b>	1	2	3	4	5	6	7	8	9	10	11	12
<b>2</b>	2	4	6	8	10	12	14	16	18	20	22	24
<b>3</b>	3	6	9	12	15	18	21	24	27	30	33	36
<b>4</b>	4	8	12	16	20	24	28	32	36	40	44	48
<b>5</b>	5	10	15	20	25	30	35	40	45	50	55	60
<b>6</b>	6	12	18	24	30	36	42	48	54	60	66	72
<b>7</b>	7	14	21	28	35	42	49	56	63	70	77	84
<b>8</b>	8	16	24	32	40	48	56	64	72	80	88	96
<b>9</b>	9	18	27	36	45	54	63	72	81	90	99	108
<b>10</b>	10	20	30	40	50	60	70	80	90	100	110	120
<b>11</b>	11	22	33	44	55	66	77	88	99	110	121	132
<b>12</b>	12	24	36	48	60	72	84	96	108	120	132	144
<b>13</b>	13	26	39	52	65	78	91	104	117	130	143	156
<b>14</b>	14	28	42	56	70	84	98	112	126	140	154	168
<b>15</b>	15	30	45	60	75	90	105	120	135	150	165	180
<b>16</b>	16	32	48	64	80	96	112	128	144	160	176	192
<b>17</b>	17	34	51	68	85	102	119	136	153	170	187	204
<b>18</b>	18	36	54	72	90	108	126	144	162	180	198	216
<b>19</b>	19	38	57	76	95	114	133	152	171	190	209	228
<b>20</b>	20	40	60	80	100	120	140	160	180	200	220	240
<b>21</b>	21	42	63	84	105	126	147	168	189	210	231	252
<b>22</b>	22	44	66	88	110	132	154	176	198	220	242	264
<b>23</b>	23	46	69	92	115	138	161	184	207	230	253	276
<b>24</b>	24	48	72	96	120	144	168	192	216	240	264	288
<b>25</b>	25	50	75	100	125	150	175	200	225	250	275	300
<b>26</b>	26	52	78	104	130	156	182	208	234	260	286	312
<b>27</b>	27	54	81	108	135	162	189	216	243	270	297	324
<b>28</b>	28	56	84	112	140	168	196	224	252	280	308	336
<b>29</b>	29	58	87	116	145	174	203	232	261	290	319	348
<b>30</b>	30	60	90	120	150	180	210	240	270	300	330	360
<b>31</b>	31	62	93	124	155	186	217	248	279	310	341	372
<b>32</b>	32	64	96	128	160	192	224	256	288	320	352	384
<b>33</b>	33	66	99	132	165	198	231	264	297	330	363	396
<b>34</b>	34	68	102	136	170	204	238	272	306	340	374	408
<b>35</b>	35	70	105	140	175	210	245	280	315	350	385	420
<b>36</b>	36	72	108	144	180	216	252	288	324	360	396	432
<b>37</b>	37	74	111	148	185	222	259	296	333	370	407	444

<b>X</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>38</b>	38	76	114	152	190	228	266	304	342	380	418	456
<b>39</b>	39	78	117	156	195	234	273	312	351	390	429	468
<b>40</b>	40	80	120	160	200	240	280	320	360	400	440	480
<b>41</b>	41	82	123	164	205	246	287	328	369	410	451	492
<b>42</b>	42	84	126	168	210	252	294	336	378	420	462	504
<b>43</b>	43	86	129	172	215	258	301	344	387	430	473	516
<b>44</b>	44	88	132	176	220	264	308	352	396	440	484	528
<b>45</b>	45	90	135	180	225	270	315	360	405	450	495	540
<b>46</b>	46	92	138	184	230	276	322	368	414	460	506	552
<b>47</b>	47	94	141	188	235	282	329	376	423	470	517	564
<b>48</b>	48	96	144	192	240	288	336	384	432	480	528	576
<b>49</b>	49	98	147	196	245	294	343	392	441	490	539	588
<b>50</b>	50	100	150	200	250	300	350	400	450	500	550	600
<b>51</b>	51	102	153	204	255	306	357	408	459	510	561	612
<b>52</b>	52	104	156	208	260	312	364	416	468	520	572	624
<b>53</b>	53	106	159	212	265	318	371	424	477	530	583	636
<b>54</b>	54	108	162	216	270	324	378	432	486	540	594	648
<b>55</b>	55	110	165	220	275	330	385	440	495	550	605	660
<b>56</b>	56	112	168	224	280	336	392	448	504	560	616	672
<b>57</b>	57	114	171	228	285	342	399	456	513	570	627	684
<b>58</b>	58	116	174	232	290	348	406	464	522	580	638	696
<b>59</b>	59	118	177	236	295	354	413	472	531	590	649	708
<b>60</b>	60	120	180	240	300	360	420	480	540	600	660	720
<b>61</b>	61	122	183	244	305	366	427	488	549	610	671	732
<b>62</b>	62	124	186	248	310	372	434	496	558	620	682	744
<b>63</b>	63	126	189	252	315	378	441	504	567	630	693	756
<b>64</b>	64	128	192	256	320	384	448	512	576	640	704	768
<b>65</b>	65	130	195	260	325	390	455	520	585	650	715	780
<b>66</b>	66	132	198	264	330	396	462	528	594	660	726	792
<b>67</b>	67	134	201	268	335	402	469	536	603	670	737	804
<b>68</b>	68	136	204	272	340	408	476	544	612	680	748	816
<b>69</b>	69	138	207	276	345	414	483	552	621	690	759	828
<b>70</b>	70	140	210	280	350	420	490	560	630	700	770	840
<b>71</b>	71	142	213	284	355	426	497	568	639	710	781	852
<b>72</b>	72	144	216	288	360	432	504	576	648	720	792	864
<b>73</b>	73	146	219	292	365	438	511	584	657	730	803	876
<b>74</b>	74	148	222	296	370	444	518	592	666	740	814	888

<b>X</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>75</b>	75	150	225	300	375	450	525	600	675	750	825	900
<b>76</b>	76	152	228	304	380	456	532	608	684	760	836	912
<b>77</b>	77	154	231	308	385	462	539	616	693	770	847	924
<b>78</b>	78	156	234	312	390	468	546	624	702	780	858	936
<b>79</b>	79	158	237	316	395	474	553	632	711	790	869	948
<b>80</b>	80	160	240	320	400	480	560	640	720	800	880	960
<b>81</b>	81	162	243	324	405	486	567	648	729	810	891	972
<b>82</b>	82	164	246	328	410	492	574	656	738	820	902	984
<b>83</b>	83	166	249	332	415	498	581	664	747	830	913	996
<b>84</b>	84	168	252	336	420	504	588	672	756	840	924	1008
<b>85</b>	85	170	255	340	425	510	595	680	765	850	935	1020
<b>86</b>	86	172	258	344	430	516	602	688	774	860	946	1032
<b>87</b>	87	174	261	348	435	522	609	696	783	870	957	1044
<b>88</b>	88	176	264	352	440	528	616	704	792	880	968	1056
<b>89</b>	89	178	267	356	445	534	623	712	801	890	979	1068
<b>90</b>	90	180	270	360	450	540	630	720	810	900	990	1080
<b>91</b>	91	182	273	364	455	546	637	728	819	910	1001	1092
<b>92</b>	92	184	276	368	460	552	644	736	828	920	1012	1104
<b>93</b>	93	186	279	372	465	558	651	744	837	930	1023	1116
<b>94</b>	94	188	282	376	470	564	658	752	846	940	1034	1128
<b>95</b>	95	190	285	380	475	570	665	760	855	950	1045	1140
<b>96</b>	96	192	288	384	480	576	672	768	864	960	1056	1152
<b>97</b>	97	194	291	388	485	582	679	776	873	970	1067	1164
<b>98</b>	98	196	294	392	490	588	686	784	882	980	1078	1176
<b>99</b>	99	198	297	396	495	594	693	792	891	990	1089	1188