

Be the computer

Add up the red numbers, take the remainder after dividing by 26, find the letter.

Name: _____

Date: _____

A	B	C	D	E	F	G	H	I	J	K	L	M
0	1	2	3	4	5	6	7	8	9	10	11	12
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
13	14	15	16	17	18	19	20	21	22	23	24	25

% 26 by hand: keep taking 26 off until you cannot. **26 times table:**

1–10	26	52	78	104	130	156	182	208	234	260
11–20	286	312	338	364	390	416	442	468	494	520
21–30	546	572	598	624	650	676	702	728	754	780
31–40	806	832	858	884	910	936	962	988	1014	1040
41–50	1066	1092	1118	1144	1170	1196	1222	1248	1274	1300

Part 1 Decode three tiny images

Image 1 (worked example)

60	58	146
179	176	119
164	185	85

Add up the 9 red numbers (working)

$$60 + 58 + 146 + 179 + 176 + 119 + 164 + 185 + 85 = 1172$$

Total

1172

Total % 26

2

$$1172 - 26 \times 45 = 2$$

Letter

C

Image 2 (your turn)

48	212	202
35	126	187
177	61	162

Add up the 9 red numbers (working)

Total

Total % 26

Letter

Image 3 (your turn)

44	180	113
178	98	155
165	160	47

Add up the 9 red numbers (working)

Total

Total % 26

Letter

Part 2 How long?

1 One tiny image took me minutes.

2 The real challenge has 37 images, each $640 \times 640 = 409,600$ pixels. Roughly how long by hand?

Hint: a tiny image has 9 numbers. $409,600 \div 9$ is about 45,000 tiny images *per picture*. Then multiply by 37!

3 What should we get the computer to do?
