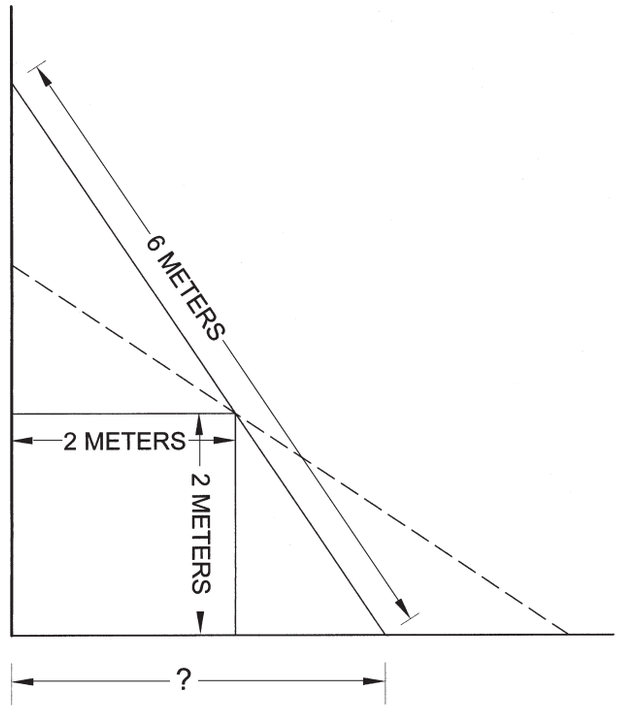
problem corner | by Dave Lindell and Benjamin Bloch

Problem 140

by Dave Lindell, L.S.

A 6-meter-long ladder leans against a wall and a 2-meter-deep and 2-meter-high shed. How far is the foot of the ladder from the wall?



Problem 141

by Benjamin Bloch, Ph.D.

Every positive number can be placed in one of nine columns headed by the single digits **1** through **9**.

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

Review

You can immediately find the single digit column heading every positive number by adding the digits in that number until a single digit is obtained. To indicate that you are reducing a number to its single digit column you write it as: 137=>11=>**2**. Thus, the number 137 falls under the column headed by the single digit **2**. The final digit is called the SDQ or single digit quality.

Without doing the actual operation, determine the SDQ of the following:

a) 9 x 156,405.8072 => ?

b) 126.447 x 205,144.36 x 0.09 => ?

c) 2 x 2 x 2 x 2 x 2 x 40.5 => ?

d) 1 x 2 x 3 x 4 x 5 x 6 x 7 x 8 x 9 => ?

e) 1.80×6^{11} => ?