代幾 I 計算演習 [問題] (2008/07/03)

問. 次の点と平面の間の距離を求めなさい

Q.1

$(0,-1,1)$, $x+5y+5z=-4$

Q.2

$(3,3,3)$, $x+2y+4z=2$

Q.3

$(1,3,0)$, $4x+5y-z=-2$

Q.4

$(-1,0,-1)$, $3x+3y-2z=4$

Q.5

$(-5,3,0)$, $x+4y-5z=1$

Q.6

$(5,-2,1)$, $3x-y=2$

Q.7

$(4,-3,5)$, $4x+4y-5z=-4$

Q.8

$(-1,4,-3)$, $3x-3y-z=-4$

Q.9

$(-1,4,-1)$, $x+3y+5z=3$

Q.10

$(5,-1,4)$, $5x-5y+2z=-4$

Q.11

$(4,-3,-5)$, $4x-2y-z=5$

Q.12

$(-1,-4,5)$, $x+4y+2z=-2$

Q.13

$(2,-4,-5)$, $y-z=-2$

Q.14

$(-2,0,3)$, $y+4z=-5$

Q.15

$(-1,-3,1)$, $2x-3y-z=4$

Q.16

$(2,4,-3)$, $5y+z=1$

Q.17

$(-4,4,3)$, $4y-z=1$

Q.18

$(1,4,0)$, $x-2y=2$

Q.19

$(3,2,3)$, $4x-y+2z=2$

Q.20

$(1,4,3)$, $5y+z=0$

Q.21

$(-4,4,2)$, $3x+4y-z=1$

Q.22

$(3,0,-4)$, $5x+3z=2$

Q.23

$(-1,-3,-1)$, $x+5y+5z=5$

Q.24

$(5,-4,1)$, $3x+2y+2z=-4$

Q.25

$(5,-4,-3)$, $5x-5y-3z=2$

Q.26

$(3,-2,-4)$, $x+y-z=0$

Q.27

$(3,-2,-5)$, $4x-2y+4z=-3$

代幾 I 計算演習 [解答] (2008/07/03)

A.1

$$\frac{4\sqrt{51}}{51}$$

A.2

$$\frac{19\sqrt{21}}{21}$$

A.3

$$\frac{\sqrt{42}}{2}$$

A.4

$$\frac{5\sqrt{22}}{22}$$

A.5

$$\frac{\sqrt{42}}{7}$$

A.6

$$\frac{3\sqrt{10}}{2}$$

A.7

$$\frac{17\sqrt{57}}{57}$$

A.8

$$\frac{8\sqrt{19}}{19}$$

A.9

$$\frac{3\sqrt{35}}{35}$$

A.10

$$\frac{7\sqrt{6}}{3}$$

A.11

$$\frac{22\sqrt{21}}{21}$$

A.12

$$\frac{5\sqrt{21}}{21}$$

A.13

$$\frac{3\sqrt{2}}{2}$$

A.14

$$\sqrt{17}$$

A.15

$$\frac{\sqrt{14}}{7}$$

A.16

$$\frac{8\sqrt{26}}{13}$$

A.17

$$\frac{12\sqrt{17}}{17}$$

A.18

$$\frac{9\sqrt{5}}{5}$$

A.19

$$\frac{2\sqrt{21}}{3}$$

A.20

$$\frac{23\sqrt{26}}{26}$$

A.21

$$\frac{\sqrt{26}}{26}$$

A.22

$$\frac{\sqrt{34}}{34}$$

A.23

$$\frac{26\sqrt{51}}{51}$$

A.24

$$\frac{13\sqrt{17}}{17}$$

A.25

$$\frac{52\sqrt{59}}{59}$$

A.26

$$\frac{5\sqrt{3}}{3}$$

A.27

$$\frac{1}{6}$$